



# UBS Group AG and UBS AG

*Annual Report 2017*



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# Dear shareholders,

For our shareholder letter this year, we have chosen a format that answers a series of questions that we are regularly asked by different stakeholders of the bank.

## **What are the financial highlights of the past year?**

2017 was an excellent year for us, with profit before tax up 29% to CHF 5.3 billion. We also delivered on our CHF 2.1 billion net savings program. That said, at UBS performance is not just judged by annual financial results. One of our firm's three Principles – along with Client Focus and Excellence – is Sustainable Performance, which we define as focusing on the long term and providing consistent returns to our stakeholders.

## **Why was your net profit attributable to shareholders far lower in 2017 than it was in 2016?**

Like many of our peers, we were affected by a net write-down of our US deferred tax assets, due to the new US tax law. We had been able to write up these deferred tax assets in the past few years, as a result of our strong profitability in the US, and they remain in place for future utilization. The write-down in 2017 had no impact on our fully applied CET1 capital and does not affect our ability to return capital. Excluding the effects of these US tax law changes, net profit was CHF 4 billion, up 22%.

## **Is UBS's capital position still a competitive advantage?**

Yes, definitely. Capital strength continues to be a key pillar of our strategy. Our fully applied CET1 ratios are comfortably above the 2020 requirements. Since 2012, we've substantially reduced risk and balance sheet exposures, while increasing our total loss-absorbing capacity by around CHF 50 billion to almost CHF 80 billion. Our progress and overall resilience is reflected in our valuation compared to peers, our credit ratings and, most importantly, the trust our clients place in us. At the same time, the greater visibility on future capital requirements provided by the Basel Committee at the end of 2017 enabled us to update our capital returns policy and plan more meaningfully for the future.

## **What are the details of your updated capital returns policy?**

Our aim is to further increase returns to shareholders while building on our strong capital position. Going forward, our priority is to pay an ordinary dividend, growing at mid-to-high single-digit percentage per annum, while considering supplementary returns, most likely in the form of share buybacks. For 2017, we intend to propose a dividend to UBS Group AG shareholders, for approval at our May 3rd Annual General Meeting (AGM), of CHF 0.65 per share, an 8% increase on the prior year. We'll also initiate a share repurchase program of up to CHF 2 billion over three years, including up to CHF 550 million in 2018.

## **Did the UBS share price develop as you thought it would in 2017?**

While we don't set specific absolute targets for our share price, our aim is that the unique value of our franchise – which is more than the sum of its parts – is properly reflected. A good measure is our valuation on a relative basis. From that perspective – looking at the ratio of our share price to our tangible book value – we've been trading at a ratio above one for the past six years and remain in a strong position compared to many peers. Relative share price performance is influenced by a number of factors including business models and geographic exposure. In 2017, peers with greater overall US presence and less influenced by low and negative interest rates in Europe and Switzerland were operating in a much more favorable macroeconomic setting. Combined with the changing regulatory environment in the US, this is reflected in relative transatlantic share price performance. Looking ahead, we've set ambitious return and efficiency targets for the next three years to drive further valuation growth.

## **Your strategy has remained the same for quite a while – is it time to change it?**

While we continuously adjust and improve to adapt to a changing environment, our strategic focus on global wealth management and universal banking in Switzerland enhanced by focused and competitive Investment Bank and Asset Management businesses is right for UBS. Sustainable performance is only possible with a long-term strategy. We're the clear leader in global wealth management and in Switzerland, with the most sophisticated capabilities. The global wealth management market is forecast to grow at twice GDP and as the firm with the most diversified geographic footprint, we are in the best position to benefit from this development. Now that we have more regulatory clarity on future capital and liquidity requirements, we are sharpening our focus on growth across our businesses and making further investments to continue increasing returns to shareholders.

## **Are your other businesses less important given your focus on wealth management?**

No, the UBS franchise is unique and not just about wealth management. Our diversified business model also benefits from Personal & Corporate Banking, the Investment Bank and Asset Management. All are successful businesses in their own right. Together, they make a significant contribution to earnings, diversify revenues and generate high-quality returns. Without them, our Global Wealth Management business would not be what it is today, nor could it deliver on its aspirations. And our Swiss roots and UBS brand continue to be a huge advantage – both in our home market and in growth regions such as Asia Pacific.



**Axel A. Weber** Chairman of the Board of Directors and **Sergio P. Ermotti** Group Chief Executive Officer

**Where do you expect to grow and invest going forward?**

From a geographic standpoint, we have a clear ambition to grow in the Americas and to reinforce our leadership in our home market Switzerland. And we are big believers in the Asia Pacific opportunity, especially China, where wealth creation continues to accelerate and we are in a very strong competitive position. In the Europe, Middle East and Africa region, we want to leverage our capabilities to grow our share in a market that is more and more likely to consolidate. To shape our digital future, we intend to keep investing at least 10% of the Group's revenues in technology, adding around CHF 1 billion in tech spend over the next three years. We'll focus these investments on enhancing and differentiating the client experience and product excellence UBS offers, while also accelerating effectiveness and efficiency.

**Is your workforce prepared for these technology investments, which may automate many of their current tasks?**

That's an existential question all companies are faced with when considering the fourth industrial revolution. On one hand, automation will be necessary, as from a demographic point of view more people will be retiring than entering the workforce. On the other hand, however, it's not just about technology, but about how we'll work in the future. Companies that have succeeded in the past can't be complacent – they'll need to help their staff adapt. One way we do that at UBS is by providing learning and development opportunities to our employees. In 2017, they participated in approximately 765,500 training activities. And our own UBS University offers more than 2,400 e-learning and classroom-based trainings. It's our responsibility, but also that of our employees, to invest in their capabilities so that they stay agile and flexible.

**Why have you not announced a new cost savings program?**

We're no longer in restructuring mode, so efficiency has moved from being a program to how we run the bank day to day. And the fact that we just completed a cost savings program delivering CHF 2.1 billion in net savings does not mean efficiency is no longer on the agenda. We've set quite demanding internal targets for our business divisions and Corporate Center to drive positive operating leverage – so to increase revenues while reducing costs. We've also said that we're targeting a cost/income ratio of below 75% for the Group. What we've refrained from doing, however, is to go public with a big, aggregated savings number to be achieved in a number of years. While such an approach may attract headlines and please some in the analyst community, it can lead to behavior that runs contrary to our long-term approach and, for example, jeopardize client service and risk management, ultimately undermining sustainable performance.

**Who does UBS create value for?**

Clients, shareholders and employees are the primary stakeholders we create value for. Our role as a bank is to finance economic growth by facilitating investment and credit. And we support people and businesses with the financial services they need to reach their goals. As a firm, we contribute by directly employing over 60,000 people, by consuming products and services and by paying taxes.

**Is UBS paying taxes again in Switzerland?**

Yes, we're actually a top taxpayer in the country. UBS's corporate tax payments over the last 20 years add up to around CHF 13 billion, including CHF 3.5 billion post-crisis. But being a good corporate citizen is about far more than just paying taxes. It also means acting responsibly, and our stakeholders expect nothing less.

**How else does UBS create positive value for society?**

We are strongly committed to being – and remaining – a leader in the field of sustainability. Our cross-divisional organization UBS and Society focuses the firm on this direction. It covers our activities and capabilities related to sustainable investing and philanthropy with clients, our environmental and human rights policies governing client and supplier relationships, our environmental footprint and our community investments. And, we're happy to report that we're being recognized for our work across these areas. Among others, the Dow Jones Sustainability Indices, which are the most widely respected sustainability ratings, confirmed UBS as the industry leader for the third year running in 2017.

**How do you make sure your corporate culture supports long-term value creation?**

Over the past six years we've brought a more traditional banking mentality to UBS, really focused on our clients, sustainable performance and excellence in everything we do. We've incentivized behaviors that underline the importance not only of what is achieved, but also how it's achieved. And we've set targets that drive long-term success. To capture the opportunities ahead, we'll continue to do just that.

Thank you for your ongoing support. We look forward to your feedback and also to welcoming you at our AGM on 3 May 2018 in Basel.

9 March 2018

Yours sincerely,



Axel A. Weber  
Chairman of the  
Board of Directors



Sergio P. Ermotti  
Group Chief Executive Officer

# Our key figures

CHF million, except where indicated	As of or for the year ended		
	31.12.17	31.12.16	31.12.15
<b>Group results</b>			
Operating income	29,067	28,320	30,605
Operating expenses	23,800	24,230	25,116
Operating profit / (loss) before tax	5,268	4,090	5,489
Net profit / (loss) attributable to shareholders	1,053	3,204	6,203
Diluted earnings per share (CHF) <sup>1</sup>	0.27	0.84	1.64
<b>Key performance indicators<sup>2</sup></b>			
<b>Profitability</b>			
Return on tangible equity (%)	2.4	6.9	13.7
Cost / income ratio (%)	81.5	85.4	81.8
<b>Growth</b>			
Net profit growth (%)	(67.1)	(48.3)	79.0
Net new money growth for combined wealth management businesses (%) <sup>3</sup>	2.1	2.1	2.2
<b>Resources</b>			
Common equity tier 1 capital ratio (fully applied, %) <sup>4</sup>	13.8	13.8	14.5
Common equity tier 1 leverage ratio (fully applied, %) <sup>4</sup>	3.7	3.5	3.3
Going concern leverage ratio (fully applied, %) <sup>5</sup>	4.7	4.6	
<b>Additional information</b>			
<b>Profitability</b>			
Return on equity (%)	2.0	5.9	11.8
Return on risk-weighted assets, gross (%) <sup>6</sup>	12.6	13.2	14.4
Return on leverage ratio denominator, gross (%) <sup>6</sup>	3.3	3.2	
<b>Resources</b>			
Total assets	915,642	935,016	942,819
Equity attributable to shareholders	51,214	53,621	55,313
Common equity tier 1 capital (fully applied) <sup>4</sup>	32,671	30,693	30,044
Common equity tier 1 capital (phase-in) <sup>4</sup>	35,494	37,788	40,378
Risk-weighted assets (fully applied) <sup>4</sup>	237,494	222,677	207,530
Common equity tier 1 capital ratio (phase-in, %) <sup>4</sup>	14.9	16.8	19.0
Going concern capital ratio (fully applied, %) <sup>5</sup>	17.6	17.9	
Going concern capital ratio (phase-in, %) <sup>5</sup>	21.7	24.7	
Going concern loss-absorbing capacity ratio (fully applied, %) <sup>5</sup>	15.3	13.2	
Leverage ratio denominator (fully applied) <sup>4</sup>	886,116	870,470	897,607
Going concern leverage ratio (phase-in, %) <sup>5</sup>	5.8	6.4	
Going concern leverage ratio (fully applied, %) <sup>5</sup>	4.1	3.4	
Liquidity coverage ratio (%) <sup>7</sup>	143	132	124
<b>Other</b>			
Invested assets (CHF billion) <sup>8,9</sup>	3,179	2,810	2,678
Personnel (full-time equivalents)	61,253	59,387	60,099
Market capitalization <sup>10</sup>	69,125	61,420	75,147
Total book value per share (CHF) <sup>10</sup>	13.76	14.44	14.75
Tangible book value per share (CHF) <sup>10</sup>	12.04	12.68	13.00

<sup>1</sup> Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. <sup>2</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>3</sup> Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. <sup>4</sup> Based on the Swiss systemically relevant bank (SRB) framework. Refer to the "Capital management" section of this report for more information. <sup>5</sup> Based on the revised Swiss SRB framework that became effective on 1 July 2016. Refer to the "Capital management" section of this report for more information. <sup>6</sup> Calculated as operating income before credit loss / average fully applied risk-weighted assets and average fully applied leverage ratio denominator, respectively. <sup>7</sup> Refer to the "Balance sheet, liquidity and funding management" section of this report for more information. <sup>8</sup> Includes invested assets for Personal & Corporate Banking. <sup>9</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively. <sup>10</sup> Refer to "UBS shares" in the "Capital management" section of this report for more information.

## Events subsequent to the publication of the unaudited fourth quarter 2017 report

The 2017 results and the balance sheet as of 31 December 2017 differ from those presented in the unaudited fourth quarter 2017 report published on 22 January 2018 as a result of events adjusted for after the balance sheet date. Provisions for litigation, regulatory and similar matters increased, which reduced 2017 operating profit before tax by CHF 141 million, 2017 net profit attributable to shareholders by CHF 112 million, and both basic and diluted earnings per share by CHF 0.03.

**Terms used in this report, unless the context requires otherwise**

"UBS," "UBS Group," "UBS Group AG consolidated," "Group," "the Group," "we," "us" and "our"	UBS Group AG and its consolidated subsidiaries
"UBS AG consolidated"	UBS AG and its consolidated subsidiaries
"UBS Group AG" and "UBS Group AG standalone"	UBS Group AG on a standalone basis
"UBS AG" and "UBS AG standalone"	UBS AG on a standalone basis
"UBS Switzerland AG"	UBS Switzerland AG on a standalone basis
"UBS Limited"	UBS Limited on a standalone basis
"UBS Americas Holding LLC consolidated"	UBS Americas Holding LLC and its consolidated subsidiaries



## Corporate information

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**UBS Group AG** is incorporated and domiciled in Switzerland and operates under art. 620ff. of the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares. Its registered office is at Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, phone +41-44-234 11 11, and its corporate identification number is CHE-395.345.924. UBS Group AG was incorporated on 10 June 2014 and was established in 2014 as the holding company of the UBS Group. UBS Group AG shares are listed on the SIX Swiss Exchange and on the New York Stock Exchange (ISIN: CH0244767585; CUSIP: H42097107). UBS Group AG owns 100% of the outstanding shares of UBS AG.

**UBS AG** is incorporated and domiciled in Switzerland and operates under art. 620ff. of the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares. The addresses and telephone numbers of the two registered offices of UBS AG are: Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, phone +41-44-234 11 11; and Aeschenvorstadt 1, CH-4051 Basel, Switzerland, phone +41-61-288 50 50. The corporate identification number is CHE-101.329.561. UBS AG is a bank. The company was formed on 29 June 1998, when Union Bank of Switzerland (founded 1862) and Swiss Bank Corporation (founded 1872) merged to form UBS AG.

## Contacts

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### Investor Relations

UBS's Investor Relations team supports institutional, professional and retail investors from our offices in Zurich, London, New York and Krakow.

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UBS's Media Relations team supports global media and journalists from offices in Zurich, London, New York and Hong Kong.

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### Office of the Group Company Secretary

The Group Company Secretary receives inquiries on compensation and related issues addressed to members of the Board of Directors.

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### Shareholder Services

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For global registered share-related inquiries in the US.

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+1-800-231-5469

TDD foreign shareholders  
+1-201-680-6610

## Corporate calendar UBS Group AG

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Publication of the first quarter 2018 report:	Monday, 23 April 2018
Annual General Meeting 2018:	Thursday, 3 May 2018
Publication of the second quarter 2018 report:	Tuesday, 24 July 2018
Publication of the third quarter 2018 report:	Tuesday, 23 October 2018

## Corporate calendar UBS AG

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Publication of the first quarter 2018 report:	Friday, 27 April 2018
Publication of the second quarter 2018 report:	Friday, 27 July 2018
Publication of the third quarter 2018 report:	Friday, 26 October 2018

Additional publication dates of quarterly and annual reports will be made available as part of the corporate calendar of UBS AG at [www.ubs.com/investors](http://www.ubs.com/investors).

## Imprint

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Publisher: UBS Group AG, Zurich, Switzerland | [www.ubs.com](http://www.ubs.com)

Language: English

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# Our Board of Directors



**Axel A. Weber**

Chairman of the Board of Directors/Chairperson of the Corporate Culture and Responsibility Committee/Chairperson of the Governance and Nominating Committee



**Michel Demaré**

Independent Vice Chairman/member of the Audit Committee/member of the Compensation Committee/member of the Governance and Nominating Committee



**Ann F. Godbehere**

Chairperson of the Compensation Committee/member of the Audit Committee



**William G. Parrett**

Chairperson of the Audit Committee/member of the Compensation Committee/member of the Corporate Culture and Responsibility Committee



**Robert W. Scully**

Member of the Risk Committee



**Beatrice Weder di Mauro**

Member of the Audit Committee/member of the Corporate Culture and Responsibility Committee



**David Sidwell**

Senior Independent Director/Chairperson of the Risk Committee/  
member of the Governance and Nominating Committee



**Reto Francioni**

Member of the Compensation Committee/member of the  
Corporate Culture and Responsibility Committee/member  
of the Risk Committee



**Isabelle Romy**

Member of the Audit Committee/member of the  
Governance and Nominating Committee



**Julie G. Richardson**

Member of the Risk Committee



**Dieter Wemmer**

Member of the Risk Committee

The Board of Directors (BoD) of UBS Group AG, under the leadership of the Chairman, consists of six to twelve members as per our Articles of Association. The BoD decides on the strategy of the Group upon recommendation of the Group Chief Executive Officer (Group CEO) and is responsible for the overall direction, supervision and control of the Group and its management as well as for supervising compliance with applicable laws, rules and regulations. The BoD exercises oversight over UBS Group AG and its

subsidiaries and is responsible for establishing a clear Group governance framework to provide effective steering and supervision of the Group, taking into account the material risks to which UBS Group AG and its subsidiaries are exposed. The BoD has ultimate responsibility for the success of the Group and for delivering sustainable shareholder value within a framework of prudent and effective controls, approves all financial statements for issue and appoints and removes all Group Executive Board (GEB) members.

## Our Group Executive Board



**Sergio P. Ermotti**  
Group Chief Executive Officer



**Martin Blessing**  
co-President Global Wealth Management



**Kirt Gardner**  
Group Chief Financial Officer



**Sabine Keller-Busse**  
Group Chief Operating Officer



**Tom Naratil**  
co-President Global Wealth Management and President UBS Americas



**Andrea Orcel**  
President Investment Bank



**Christian Bluhm**  
Group Chief Risk Officer



**Markus U. Diethelm**  
Group General Counsel



**Ulrich Körner**  
President Asset Management and President UBS Europe,  
Middle East and Africa



**Axel P. Lehmann**  
President Personal & Corporate Banking and President UBS Switzerland



**Kathryn Shih**  
President UBS Asia Pacific

UBS Group AG operates under a strict dual board structure, as mandated by Swiss banking law, and therefore the BoD delegates the management of the business to the GEB. Under the leadership of the Group CEO, the GEB has executive management responsibility for the steering of the Group and its business. It assumes overall responsibility for developing the Group and business division strategies and the implementation of approved strategies.

→ Refer to “Board of Directors” and “Group Executive Board” in the “Corporate governance” section of this report or to [www.ubs.com/bod](http://www.ubs.com/bod) and [www.ubs.com/geb](http://www.ubs.com/geb) for the full biographies of our BoD and GEB members

# Our evolution

UBS has played a pivotal role in the development and growth of Swiss banking. Since the firm's origins in the mid-19th century, UBS has evolved to become a global financial services firm that houses the world's largest wealth manager, the number one bank in Switzerland, a specialized and successful investment bank and one of the world's largest asset managers.

The scope and international reach of UBS today were largely shaped in the second half of the 20th century. In 1998, two of Switzerland's large banks, Union Bank of Switzerland and Swiss Bank Corporation (SBC), merged to form UBS. At the time of the merger, both banks were already well established and successful in their own right. Union Bank of Switzerland's origins go back to the Bank in Winterthur founded in 1862. SBC's founding forebear, the Basler Bankverein, was established in 1872.

In the early 1990s, SBC and Union Bank of Switzerland were both commercial banks operating mainly out of Switzerland, and both shared the vision of becoming a world leader in wealth management, a successful global investment bank and a top-tier global asset manager, while remaining an important commercial and retail bank in their home market of Switzerland.

Union Bank of Switzerland, the largest Swiss bank of its time, pursued these goals primarily through organic growth. In contrast, SBC, then the third-largest Swiss bank, grew mainly through a combination of strategic partnerships and acquisitions, including O'Connor in 1992, Brinson Partners in 1994, and S.G. Warburg, the historical pillar of UBS's Investment Bank, in 1995.

In 2000, UBS acquired PaineWebber, a US brokerage and asset management firm whose roots went back to 1879, establishing the firm as a significant player in the US. Over the last half century, UBS has largely organically built a strong presence in the Asia Pacific region, where it is the leading wealth manager and a top-tier investment bank.

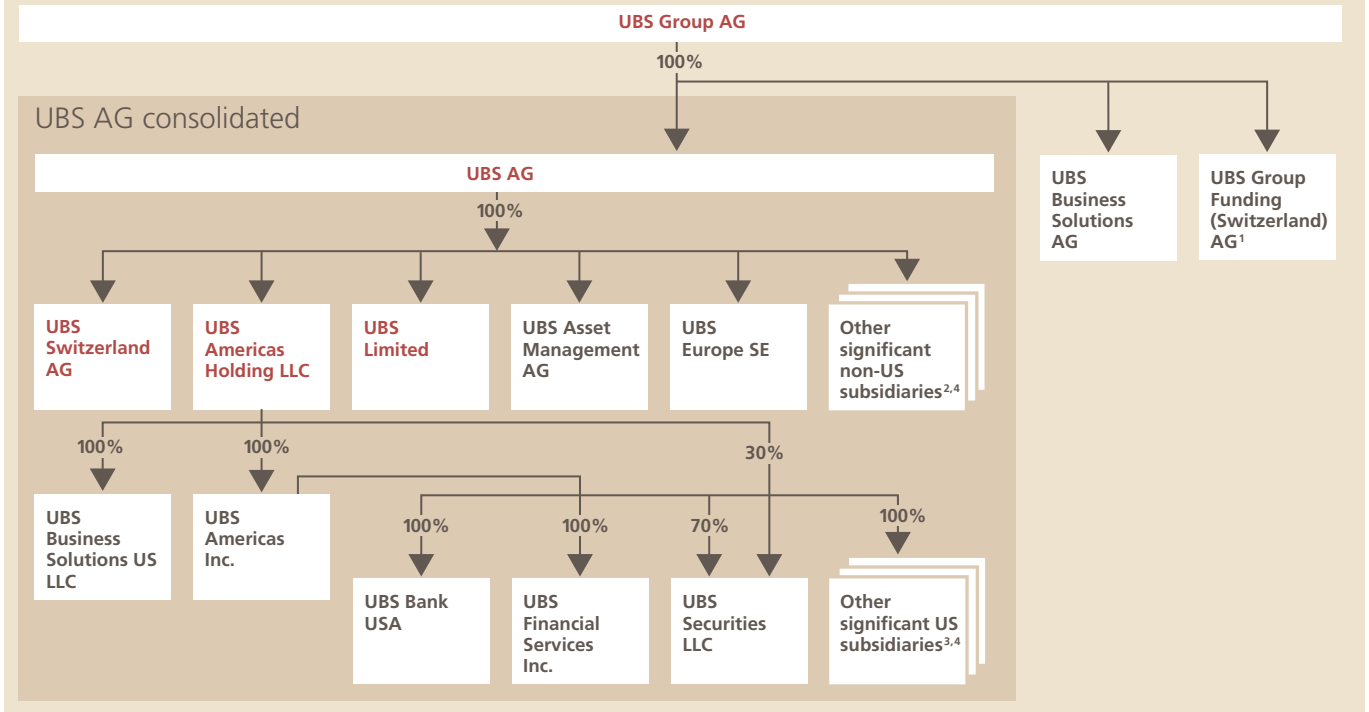
During the financial crisis of 2008, UBS incurred significant losses. In 2011, we initiated a strategic transformation of our firm toward a business model that focused on our core businesses of wealth management and personal and corporate banking in Switzerland.

We sought to revert to our roots, emphasizing a client-centric model that required less risk-taking and capital, and have successfully completed this transformation. Our Pillars, Principles and Behaviors, launched in 2014, are the foundation for our corporate strategy, identity and culture.

→ Refer to [www.ubs.com/history](http://www.ubs.com/history) for more information

In 2014, we began adapting our legal entity structure to improve the resolvability of the Group in response to too big to fail (TBTF) requirements in Switzerland and recovery and resolution regulation in other countries in which the Group operates. In December 2014, UBS Group AG became the holding company of the Group. In 2015, we transferred our Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to the newly established UBS Switzerland AG and we implemented a more self-sufficient business and operating model for UBS Limited. In 2016, we designated UBS Americas Holding LLC as our intermediate holding company for our US subsidiaries and we merged our Wealth Management subsidiaries in various European countries into UBS Europe SE. Additionally, we transferred the majority of Asset Management's operating subsidiaries to UBS Asset Management AG. UBS Business Solutions AG, a direct subsidiary of UBS Group AG, was established in 2015 and acts as the Group service company. The chart on the next page provides an overview of the principal legal entities and structure of UBS as of 31 December 2017.

## UBS Group AG consolidated



<sup>1</sup> UBS Group Funding (Switzerland) AG issues loss-absorbing additional tier 1 (AT1) capital instruments and total loss-absorbing capacity (TLAC)-eligible senior unsecured debt, which are guaranteed by UBS Group AG. <sup>2</sup> Other significant non-US subsidiaries are generally held either directly by UBS AG or indirectly through UBS Switzerland AG or UBS Asset Management AG. <sup>3</sup> Other significant US subsidiaries are generally held either directly by UBS Americas Inc. or indirectly through UBS Financial Services Inc. <sup>4</sup> Refer to "Note 28 Interests in subsidiaries and other entities" in the "Consolidated financial statements" section of this report for more information on UBS's subsidiaries, including individually significant subsidiaries and sub-groups.

■ Holding company and significant regulated subsidiaries and sub-groups subject to disclosure in UBS Group AG annual and quarterly reporting

### Changes in 2017

In 2017, we transferred shared services functions in Switzerland and the UK from UBS AG to UBS Business Solutions AG, which is our Group service company and a wholly owned subsidiary of UBS Group AG. We also completed the transfer of shared services functions in the US to our US service company, UBS Business Solutions US LLC, a wholly owned subsidiary of UBS Americas Holding LLC.

We established UBS Group Funding (Switzerland) AG in 2016 as a wholly owned direct subsidiary of UBS Group AG to issue loss-absorbing additional tier 1 (AT1) capital instruments and total loss-absorbing capacity (TLAC)-eligible senior unsecured debt, which are guaranteed by UBS Group AG. In the first half of 2017, we transferred our then outstanding TLAC-eligible senior unsecured debt to UBS Group Funding (Switzerland) AG as the issuer. Outstanding loss-absorbing AT1 capital instruments issued by UBS Group AG may in the future also be transferred to UBS Group Funding (Switzerland) AG, subject to further regulatory review. The Swiss Federal Council has

proposed amendments to Swiss tax law in order to reduce the additional tax burden on debt issuances by bank top holding companies. Should such changes become effective, we expect loss-absorbing AT1 capital instruments and TLAC-eligible senior unsecured debt to be issued directly out of UBS Group AG. At that point, we also expect to substitute UBS Group AG as issuer of outstanding capital and debt instruments issued by UBS Group Funding (Switzerland) AG.

### Further legal structure changes

We continue to consider further changes to the Group's legal structure in response to regulatory requirements and other external developments, including the anticipated exit of the UK from the EU. Such changes may include further consolidation of operating subsidiaries in the EU and adjustments to the booking entity or location of products and services.

→ **Refer to the "Risk factors" section of this report for more information**

# Our external reporting approach

## General requirements

Our external reporting requirements and the scope of our external reports are defined by general accounting law and principles, relevant stock and debt listing rules, specific legal and regulatory requirements, as well as by our own financial reporting policies.

We have to prepare and publish consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) on a half-yearly basis, in line with the requirements of SIX Swiss Exchange and New York Stock Exchange, where our shares are listed. However, we also publish our results on a quarterly basis in order to provide shareholders with more frequent disclosures than required by law. Additionally, statutory financial statements for UBS Group AG are prepared annually as the basis for our Swiss tax return, the appropriation of retained earnings and a potential distribution of dividends, subject to shareholder approval at the Annual General Meeting. Management's discussion and analysis (MD&A) complements our IFRS financial statements.

The Basel III capital adequacy framework requires us to publish a range of Pillar 3 disclosures, mainly covering risk, capital, leverage, liquidity and remuneration. These Pillar 3 disclosures are supplemented by specific additional requirements of the Swiss Financial Market Supervisory Authority (FINMA) and voluntary disclosures on our part. We are also required to disclose certain regulatory information for our significant regulated subsidiaries and sub-groups, i.e., UBS AG standalone, UBS Switzerland AG standalone and UBS Limited standalone, as well as UBS Americas Holding LLC consolidated.

In preparing these disclosures, we consistently apply our financial disclosure principles, such as transparency and relevance to our stakeholders. We also continuously seek to improve our disclosures by benchmarking them against best practice examples.

→ **Refer to "Information policy" in the "Corporate governance" section of this report for more information**

## Our Annual Report 2017, Form 20-F and additional year-end disclosures

Our year-end 2017 financial information is available on [www.ubs.com/investors](http://www.ubs.com/investors) and includes:

- the Annual Report 2017 – Group;
- the Annual Report 2017 – combined, containing information for UBS Group AG and UBS AG that is the basis for our US Securities and Exchange Commission (SEC) Form 20-F filing;
- Auszug aus dem Geschäftsbericht, the German translation of selected sections of our Annual Report 2017 – Group;
- 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups; and
- legal entity disclosures, including standalone financial statements for UBS AG and UBS Switzerland AG, as well as selected financial and regulatory information for our significant regulated subsidiaries and sub-groups.

In addition, other legal entity-specific disclosures in accordance with article 89 of the European Union Capital Requirements Directive IV (CRD IV) are provided under "EU CRD IV disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors). Information as of 31 December 2017 will be published by the end of 2018. Information for UBS Group Funding (Switzerland) AG is available under "Other subsidiaries" at [www.ubs.com/investors](http://www.ubs.com/investors).

Furthermore, we have published a consolidated Global Reporting Initiative (GRI) Document, providing comprehensive disclosures on environmental, social and governance (ESG) factors and including the disclosures on non-financial information required by German law implementing the EU Directive 2014/95 (CSR-Richtlinie-Umsetzungsgesetz / CSR-RUG). The GRI Document is available under "Annual reporting" at [www.ubs.com/investors](http://www.ubs.com/investors).

As financial information for UBS AG consolidated does not differ materially from UBS Group AG consolidated, the MD&A included in the Annual Report 2017 – combined is generally provided on a UBS Group AG consolidated basis. In addition, we provide in the combined report UBS AG consolidated financial statements in accordance with IFRS, information with respect to UBS AG consolidated's risk profile and Swiss systemically relevant bank capital and leverage ratios for UBS AG consolidated.

Beginning with the Annual Report 2017, we will include in our Form 20-F filing, and publish on our website, Extensible Business Reporting Language (XBRL) interactive financial data, as required for non-US private issuers that prepare financial statements in accordance with IFRS.

→ **Refer to "Annual reporting," "Pillar 3 disclosures," "Holding company and significant regulated subsidiaries and sub-groups" and "SEC filings" at [www.ubs.com/investors](http://www.ubs.com/investors), where the documents mentioned above are available**



## Overview of our external reporting documents

The table below provides an overview of our external reporting documents that are published on our Investor Relations website to comply with applicable legal and regulatory reporting requirements for UBS Group AG and UBS AG as well as for our

significant regulated subsidiaries and sub-groups, as defined by FINMA. Specific local regulatory reporting requirements and related documents of UBS Limited and UBS Americas Holding LLC are not reflected in this overview.

All of our reports are available on [www.ubs.com/investors](http://www.ubs.com/investors)

### Reporting level

UBS Group AG ●●	UBS AG <sup>1</sup> ●●	UBS Switzerland AG ● UBS Limited ● UBS Americas Holding LLC ●
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### Type of information<sup>2</sup>

Management's discussion and analysis	Financial statements	Supplemental SEC disclosures	Basel III Pillar 3 disclosures	Financial statements	Supplemental SEC disclosures	Selected financial and regulatory information	Basel III Pillar 3 disclosures	Financial statements	Selected financial and regulatory information	Basel III Pillar 3 disclosures
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Report name – Available on [www.ubs.com/investors](http://www.ubs.com/investors) under: – Language

**Annual Report 2017 – Group – Annual reporting – English**

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**Annual Report 2017 – combined – Annual reporting – English**

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**2017 SEC Form 20-F – UBS Group AG and UBS AG – SEC filings – English**

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**Auszug aus dem Geschäftsbericht – Annual reporting – German**

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**31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups – Pillar 3 disclosures – English**

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**Standalone legal entity and sub-group reports – Holding company and significant regulated subsidiaries and sub-groups<sup>4</sup> – English**

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<sup>1</sup> Information for UBS AG consolidated does not differ materially from UBS Group AG on a consolidated basis. Information provided in management's discussion and analysis applies for both UBS Group AG consolidated and UBS AG consolidated, except for certain disclosures in the "Risk, treasury and capital management" section, where information for UBS AG consolidated is separately provided. <sup>2</sup> Refer to the respective sections of our reports for more information on the basis of preparation and applicable requirements. <sup>3</sup> Includes the German translation of the following sections of our Annual Report 2017 – Group: "Group performance," IFRS-required disclosures in "Risk, treasury and capital management," "Corporate governance" and "Compensation." <sup>4</sup> Standalone legal entity reports for UBS Group AG, UBS AG and UBS Switzerland AG are available from 9 March 2018. The UBS Limited Annual Report 2017 will be available at [www.ubs.com/investors](http://www.ubs.com/investors) by the end of April 2018. There is no requirement to externally publish an annual report for UBS Americas Holding LLC. Information for other subsidiaries is available under "Other subsidiaries" at [www.ubs.com/investors](http://www.ubs.com/investors).

● Consolidated ● Standalone



# Operating environment and strategy

Management report

## Signposts

Throughout the Annual Report 2017, the **Audited** signpost that is displayed at the beginning of a section, table or chart indicates that those items have been audited. A triangle symbol – ▲ – indicates the end of the signpost.

# Current market climate and industry trends

## Global economic developments in 2017

In 2017, the world economy grew at the fastest rate since 2011: global GDP expanded 3.9%, from a rate of 3.2% in 2016, with each member of the G20 seeing economic growth – the first time since 2010.

Economic activity increased worldwide amid a recovery in Chinese property construction, Russia and Brazil emerging from multi-year recessions and renewed US energy sector investment in response to higher oil prices.

Equity markets responded, aided by higher corporate earnings growth and low real interest rates. Global equities rose by more than 20%, with emerging market stocks outperforming their developed market peers. European markets lagged in local currency terms, in part due to the euro's strength. The year was also notable for a lack of equity market volatility: at no point did global equities register a greater than 2.0% decline from their prior highs.

Government bond yields generally remained stable in spite of accelerating global growth. Rising US interest rates primarily affected short-dated US dollar-denominated bonds, resulting in the flattest US government bond yield curve in more than a decade. Euro- and Swiss franc-denominated bonds were largely unaffected by US rate moves.

The US dollar depreciated by around 10% on a trade-weighted basis, losing ground against most other global currencies. The euro strengthened significantly to rank as the best-performing major currency, as markets began pricing in reduced monetary stimulus from the European Central Bank.

US growth accelerated, as widely expected, thanks to robust consumption, energy investment and export growth. Reduced government expenditure proved to be the only significant drag. Despite three rate hikes from the US Federal Reserve Board, financial conditions eased throughout the year.

Eurozone growth accelerated to its fastest pace since 2007. Improved business sentiment spurred capital expenditure and private consumption remained robust alongside declining unemployment. UK growth slowed but proved more resilient to uncertainty from the UK's withdrawal from the EU than initially expected, with investment accelerating and exports benefiting from a weak British pound.

Switzerland's headline growth was disappointing, but fundamentals remained sound. Business confidence surveys rose to multi-year highs, the Swiss franc depreciated relative to the euro and falling unemployment benefited consumption.

Japan prospered, with improved trade performance helping drive the fastest pace of economic expansion since 2013. Higher rates of inflation suggest that the country's multi-year monetary stimulus program may be beginning to bear results.

In emerging markets, China's reported growth accelerated for the first time since 2010. This was largely driven by the country's property sector, which increased import demand and helped other economies in the region. Brazil emerged from a deep two-year recession, with falling inflation contributing to a significant improvement in private consumption. Russia also returned to growth after two years of contraction, driven by a recovery in energy prices, good domestic demand and lower interest rates. The economies of South Korea, Taiwan and Indonesia all grew, while India and Mexico were the only large emerging markets to decelerate. South Africa saw faster growth, although it remains at a low level.

## Economic and market outlook for 2018

We forecast little change in the economic outlook. We expect growth of 4.1% in 2018, similar to the healthy 3.9% global GDP growth rate recorded last year. Slight slowdowns in Europe and China should be offset by higher growth in the US, India and Brazil.

US economic activity should be buoyed by the passage of corporate tax cuts, which should boost consumption and corporate earnings in 2018. European growth should remain above its long-term trend rate, broadly similar to 2017, although uncertainties over the UK's withdrawal from the EU could weigh on the UK's growth. A weaker Swiss franc bodes well for Switzerland, where exports also stand to benefit from a solid global growth outlook. Cooling property construction will likely decelerate China's growth rate, but resilient consumption and exports should prevent too sharp of a slowdown.

The primary risks to the outlook relate to uncertainty over the impact of central banks' withdrawal of quantitative easing, the threat of greater protectionism in US trade policy, a more rapid increase in inflation rates that might lead to faster-than-expected interest rate hikes, a continued increase in energy prices and geopolitical instability, in particular in relation to the Middle East and North Korea. China's management of its rising debt levels and economic transition remains an important medium-term factor.

## Industry trends

### Trends by UBS business divisions

#### *Global Wealth Management*

Industry estimates suggest that global private wealth will grow by 6% per annum until 2021, with the higher wealth segments expected to grow at over 10% per annum during the same period. From a geographical perspective, the strongest growth is expected to come from Asia Pacific, with estimated annual market growth of 9.9%, according to the Boston Consulting Group Global Wealth Report 2017. Developed markets are expected to grow in line with or below the global growth rate (e.g., 5.6% per annum for North America and 3.5% per annum for Western Europe). We expect this growth profile to be favorable for our strategy of focusing on the largest and fastest-growing markets, which informed our early push to build up our capabilities in Asia and the ultra high net worth segments. We are the largest foreign wealth management firm by assets under management in key Asia Pacific markets as a result of our early entry into the region. We are also well positioned in the ultra high net worth segment, where we leverage the capabilities of our wealth management business and the Investment Bank as well as Asset Management.

#### *Personal & Corporate Banking*

Our home market, Switzerland, is an attractive market for personal and corporate banking. Switzerland is one of the wealthiest countries in the world, with average net wealth per person of approximately CHF 185,000 according to our research. However, sustained negative interest rates in Swiss francs have put pressure on banks' net interest income. From a corporate banking perspective, Switzerland is home to a significant number of large multinational corporations and exporters that have performed well despite pressure related to the strength of the Swiss franc in recent years. UBS has built a leading position with personal as well as corporate and institutional clients in Switzerland. Our objective from here is to strengthen that position through comprehensive digitalization efforts aiming to deliver a superior client experience.

#### *Asset Management*

The asset management industry is forecast to grow by approximately USD 20 trillion over the next four years, primarily driven by increases in private provision for retirement and wealth accumulation in emerging middle classes. The biggest growth is expected to come from passive assets and customized solutions, with only moderate growth in actively managed strategies. Due to our diversified offering, ranging from our passive and differentiated traditional active investment strategies to our industry-leading alternative capabilities, we believe that we are well positioned to benefit from this trend. With a view toward further strengthening our position in the market, we continue to expand initiatives in line with our clients' needs, such as our Platform Services offering, sustainable and impact investing, and our extensive offering in China.

#### *Investment Bank*

The shift in global revenue pools from investment banks to other capital markets players (i.e., custodians, buy-side firms, information providers and exchanges) observed in recent years is expected to ease. Specifically, an external survey forecasts that investment banks' market share will stabilize at about 34% of global industry revenues in 2020, corresponding to USD 249 billion, i.e., a 2% compound annual growth rate from 2016 through 2020. M&A will likely be a material revenue driver for investment banks as a consequence of the Tax Cuts and Jobs Act signed in December 2017, which may cause corporations to allocate capital to deal-making. We believe UBS is well positioned to capture the value generated from this expected increase in activity due to its client-centric business model and global M&A infrastructure.

#### *Wealth transfers*

Demographic and socioeconomic developments continue to generate shifts in wealth among age and gender groups. As a result, the client base of the wealth management industry is becoming increasingly diverse. The industry is therefore likely to adapt its services and offerings to meet the specific needs and expectations of growing client groups. UBS strives to become the preferred wealth manager of these clients through its active segment management strategy. This includes bespoke product offerings, such as UBS Unique, which focuses on improving female client satisfaction. Additionally, we offer wealth planning expertise that is supported by dedicated intergenerational wealth transfer services for all segments, such as Great Wealth for ultra high net worth clients.

### Retirement funding

Over recent years, the pension industry has faced two key challenges: fundamental demographic shifts, such as aging populations, and lower expected returns.

Beyond structural answers to these challenges, such as the progressive shift from defined benefit to defined contribution pensions, we believe pension funds are reassessing their asset allocation approach. Indeed, many pension funds are now allocating a higher share of their portfolios to alternative investments such as private equity, hedge funds, real estate and infrastructure in a search for higher-yielding exposures.

We see this development as positive for UBS as these funds will likely need further support to define their investment strategy and target portfolio allocation. In addition, our private banking and wealth management clients are expected to need further financial and retirement planning advice, which we are able to provide holistically through our wealth planning services.

### Digitalization

Technology is transforming the way banks operate and is expected to remain the key change driver for the financial industry in the years to come. While IT spend used to be considered a means to make banks more efficient, it has now become an imperative to stay relevant in the face of competition from other banks as well as non-traditional financial services providers.

Banks are increasingly leveraging digital technology to provide a more compelling client experience. Additionally, client advisors benefit from integrated IT solutions that reduce the time required for administrative tasks and increase capacity for value-adding activities for clients and for UBS.

We believe that technology-driven changes in bank operations will allow efficiency gains through automation. Technologies such as artificial intelligence and robotics can be used to automate selected back- and middle-office processes, thus reducing error rates and increasing efficiency.

### Consolidation

We expect further consolidation in the financial services industry. In many regions and business areas, there are many small players and, as a result, the search for scale and cost efficiencies will be a key M&A driver in such markets. Additionally, many banks are

seeking exposure to regions with attractive growth profiles, such as Asia and emerging markets, through local acquisitions. Lastly, the increased focus on core capabilities or geographical footprints and the ongoing simplification of operating models to decrease operational and compliance risks should also lead to asset sales.

### New competitors

Our competitive environment is also evolving. In addition to our traditional competitors in the asset-gathering businesses, new entrants, including fintechs and other companies targeting selected components of the value chain, present new competitive challenges. A fundamental unbundling of the value chain and client relationships, ultimately resulting in the disintermediation of banks by fintechs or other competitors, has not yet materialized. Over the longer term, we believe the entry of large platform companies into the financial services industry could result in a significant competitive threat due to their strong franchise and access to a large base of clients and client data.

### Regulation

The flow of new regulations has been gradually slowing and there has been initial movement to reduce some of the regulatory burdens, primarily in the US. Nevertheless, a number of post-financial crisis reforms, such as the Basel III finalization, are expected to continue to increase risk-weighted assets. Additionally, the revised Markets in Financial Instruments Directive (MiFID II) will have an impact on the way we do business. The investor protection component of MiFID II requires us to review suitability and appropriateness and enhance transparency toward clients with extended disclosures, e.g., on costs and charges, and reporting. The market structure component of MiFID II will lead to increased pre- and post-trade transparency requirements across a broad range of asset classes, including derivatives and bonds, in addition to enhanced record-keeping and transaction reporting obligations.

Over the past years, we have adapted our business model and believe that we are well positioned to operate efficiently while absorbing upcoming changes to the regulatory environment.

→ **Refer to the “Regulatory and legal developments” and “Capital management” sections of this report for more information**

# Regulation and supervision

The Swiss Financial Market Supervisory Authority (FINMA) is UBS's home country regulator and consolidated supervisor. As a financial services provider with an international footprint, we are also regulated and supervised by the relevant authorities in each of the jurisdictions where we conduct business, including the US, the UK and other member states of the EU. Through UBS AG and UBS Switzerland AG, which are licensed as banks in Switzerland, we may engage in a full range of financial services activities in Switzerland and abroad, including personal banking, commercial banking, investment banking and asset management.

As we are a designated global systemically important bank (G-SIB) and a systemically relevant bank (SRB) in Switzerland, we are subject to more rigorous regulatory requirements and supervision than most other Swiss banks. Since the financial crisis of 2008, regulation of financial services firms has been undergoing significant changes globally. These changes, which continue to require significant resources to implement, have had a material effect on how we conduct our business and have led to increased costs.

- Refer to the **"Our evolution"** section of this report for more information
- Refer to the **"Regulatory and legal developments"** and **"Risk factors"** sections of this report for more information

## Regulation and supervision in Switzerland

### Supervision

UBS Group AG and its subsidiaries are subject to consolidated supervision by FINMA under the Swiss Federal Law on Banks and Savings Banks (Swiss Banking Act) and the related ordinances that impose, among other requirements, minimum standards for capital, liquidity, risk concentration and organizational structure. FINMA fulfills its statutory supervisory responsibilities through licensing, regulation, monitoring and enforcement. FINMA is responsible for prudential supervision and mandates audit firms to perform on its behalf a regulatory audit and certain other supervisory tasks.

### Liquidity and capital adequacy

As an internationally active Swiss SRB, we are subject to capital and total loss-absorbing capacity requirements, which are based on both risk-weighted assets and leverage ratio denominator and are among the most stringent in the world. We are also required to maintain a minimum liquidity coverage ratio of high-quality liquid assets to estimated stressed short-term net cash outflows. Following the postponed implementation of the net stable funding ratio requirements and subject to finalization of

the rules, we will be required to maintain a minimum net stable funding ratio.

- Refer to the **"Capital management"** section of this report for more information on the Swiss SRB framework and the Swiss too big to fail requirements
- Refer to the **"Treasury management"** section of this report for more information on liquidity coverage ratio requirements

### Resolution planning and resolvability

The Swiss Banking Act and related ordinances provide FINMA with additional powers to intervene in order to prevent a failure or resolve a failing financial institution, including UBS Group AG, UBS AG and UBS Switzerland AG. These measures may be triggered when certain thresholds are breached and permit the exercise of considerable discretion by FINMA in determining whether, when or in what manner to exercise such powers. In case of a possible insolvency, FINMA may impose more onerous requirements on us, including restrictions on the payment of dividends and interest as well as measures to alter our legal structure (e.g., to separate lines of business into dedicated entities, with limitations on our intra-Group funding and certain guarantees) or to reduce business risk in some manner. The Swiss Banking Act provides FINMA with the ability to extinguish or convert to common equity the liabilities of the Group in connection with its resolution.

Furthermore, Swiss too big to fail provisions require Swiss SRBs, including UBS, to put in place a viable emergency plan to preserve the operation of systemically important functions in case of a failure of the institution. In response to these requirements in Switzerland, as well as to similar requirements in other jurisdictions, UBS has developed comprehensive recovery plans that provide the tools to manage a severe loss event. UBS also provides relevant authorities with resolution plans for restructuring or winding down certain businesses in the event the firm could not be stabilized. Alongside these measures, we have invested significantly in structural, financial and operational ring-fencing measures to improve the Group's resolvability.

## Regulation and supervision outside Switzerland

### Regulation and supervision in the US

In the US, UBS is subject to regulation and supervision by the Board of Governors of the Federal Reserve System (Federal Reserve Board) under a number of laws. UBS Group AG and UBS AG are both subject to the Bank Holding Company Act as foreign banking organizations, under which the Federal Reserve Board has supervisory authority over our US operations. Furthermore, our US operations are subject to oversight by the Federal Reserve Board's Large Institution Supervision Coordinating Committee, which coordinates supervision of large or complex financial institutions.

In addition to being a financial holding company under the Bank Holding Company Act, UBS AG maintains several branches and representative offices in the US, which are authorized and supervised by the Office of the Comptroller of the Currency. UBS AG is currently registered as a swap dealer with the Commodity Futures Trading Commission (CFTC), and we expect it will register as a security-based swap dealer with the Securities and Exchange Commission (SEC) when such registration is required.

UBS Americas Holding LLC, the intermediate holding company for our non-branch operations in the US as required under the Dodd-Frank Act, is subject to requirements established by the Federal Reserve Board related to risk-based capital, liquidity, the Comprehensive Capital Analysis and Review (CCAR) stress testing and capital planning process, resolution planning and governance. Beginning in 2018, the Federal Reserve Board will publish its CCAR assessment for UBS Americas Holding LLC and other large foreign banking organizations subject to CCAR.

UBS Bank USA, a Federal Deposit Insurance Corporation (FDIC)-insured depository institution subsidiary, is licensed and regulated by state regulators in Utah and the FDIC.

UBS Financial Services Inc., UBS Securities LLC and several other US subsidiaries are subject to regulation by a number of different government agencies and self-regulatory organizations, including the SEC, the Financial Industry Regulatory Authority, the CFTC, the Municipal Securities Rulemaking Board and national securities exchanges, depending on the nature of their business.

#### *Regulation and supervision in the UK*

Our regulated operations in the UK are mainly subject to the authority of the Prudential Regulation Authority (PRA), which is part of the Bank of England, and the Financial Conduct Authority (FCA). We are also subject to the rules of the London Stock Exchange and other securities and commodities exchanges of which UBS AG and UBS Limited are members.

UBS Limited is a private limited company incorporated in the UK and is authorized by the PRA and regulated by the PRA and the FCA to conduct a broad range of banking and investment businesses.

UBS AG maintains a UK-registered branch in London that serves as a global booking center for our Investment Bank.

In addition, our regulated subsidiaries in the UK that provide asset management services are authorized and regulated mainly by the FCA, with one entity being also subject to the authority of the PRA.

Financial services regulation in the UK is currently conducted in accordance with EU directives covering, among other topics, compliance with certain capital and liquidity adequacy standards, client protection requirements and business conduct principles. This may be subject to change depending on how the relationship between the UK and the EU evolves as a result of the UK's decision to leave the EU.

#### *Regulation and supervision in Germany*

UBS Europe SE, headquartered in Frankfurt, Germany, is prudentially supervised by the Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority – BaFin) and subject to EU and German laws and regulations. In addition to Germany, UBS Europe SE has branches in Austria, Denmark, Italy, Luxembourg, Spain and Sweden and it is subject to conduct supervision by local authorities in all of these countries. An additional branch in the Netherlands is currently being wound down.

#### **Anti-money laundering and anti-corruption**

Combating money laundering and terrorist financing has been a major focus of government policy relating to financial institutions in recent years. The US Bank Secrecy Act and other laws and regulations applicable to UBS require the maintenance of effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, and to verify the identity of our clients. Failure to maintain and implement adequate programs to prevent money laundering and terrorist financing could result in significant legal and reputation risk.

Additionally, we are subject to laws and regulations in jurisdictions in which we operate prohibiting corrupt or illegal payments to government officials and others, including the US Foreign Corrupt Practices Act and the UK Bribery Act. We maintain policies, procedures and internal controls intended to comply with these laws and regulations.

#### **Data protection**

We are subject to laws and regulations concerning the use and protection of customer, employee, and other personal and confidential information, including provisions under Swiss law, the EU General Data Protection Regulation (GDPR), which provides significant new data protection, and laws of other jurisdictions.

If implemented as proposed, we will become subject to the revised Swiss data protection law (Swiss Federal Act on Data Protection), which seeks to improve data protection for individuals by, among other measures, enhancing the transparency and accountability rules applicable to companies processing data. This change in the law would align Swiss data regulation with revised European legislation, including the EU GDPR, and is intended to ensure the equivalence necessary for the continued cross-border transmission of data. We expect the revised law to take effect in 2019.

→ **Refer to the "Risk factors" section of this report for more information on regulatory change**



# Regulatory and legal developments

## Significant tax law changes enacted in the US

In December 2017, the Tax Cuts and Jobs Act (TCJA) was signed into law. The act includes a reduction in the federal corporate tax rate to 21% from 35%. The rate reduction resulted in a CHF 2.9 billion net write-down in the Group's deferred tax assets (DTAs) in the fourth quarter of 2017. The net decrease in DTAs had a negligible impact on our fully applied CET1 capital.

The TCJA also introduced a new minimum tax regime, referred to as the base erosion and anti-abuse tax (BEAT), which targets US businesses benefiting from deductible payments made to non-US related parties. The BEAT rate, which is 6% for banks in 2018, increasing to 11% in 2019 and to 13.5% in 2026, applies if BEAT, calculated on a modified taxable income base, is higher than the regular federal corporate tax in a given year. We currently expect that BEAT could increase our current tax expense by up to CHF 60 million in 2018. We are considering options to mitigate its effects and awaiting guidance from the US Department of Treasury on key aspects of the new tax law. Additionally, the enactment of the TCJA, and the narrowing of the window between the end of the forecast period and the expiry of our US net operating losses, may lead us to review our approach to periodically remeasuring our US DTAs and the timing for recognizing deferred tax in our income statement. For 2018, we currently forecast a full-year tax rate of approximately 25%, including the effects of BEAT, and excluding the effects from any periodic remeasurement of DTAs and any change in the manner in which we remeasure DTAs.

→ Refer to the "Group performance" section and "Note 8 Income taxes" in the "Consolidated financial statements" section of this report for more information

## US Department of Labor fiduciary rule becomes effective

Following various delays, the US Department of Labor (DOL) fiduciary rule became effective on 9 June 2017. Since then, UBS has been operating under the rule, which expands the circumstances that cause a person to become a fiduciary subject to the Employee Retirement Income Security Act of 1974 (ERISA) in relation to corporate and individual retirement plans. Under ERISA, UBS is required to adhere to strict standards of prudence and loyalty when dealing with affected retirement accounts and is prohibited from entering into transactions where there is a conflict of interest unless an exemption applies. Exemptions applicable to our wealth management business in the US under the rule require compliance with impartial conduct principles. Moreover, the exemptions require compliance with significant additional technical conditions. In November 2017, the DOL extended the transition period and delayed the applicability of these technical conditions to 1 July 2019 while it continues to consider potential changes to the exemptions. Absent further changes to the rule, we would be required to make significant investments in order to comply with these technical conditions.

## Swiss corporate tax reform

Following the rejection of the Swiss corporate tax reform by popular referendum in February 2017, the Swiss Federal Council consulted on a revised proposal from September to December 2017. The new proposal has been modified in response to the referendum outcome, while maintaining the overall objective of the original reform proposals, seeking to align the respective cantonal corporate tax regimes with international standards by, among other things, eliminating reduced holding company tax rates and other privileges. The final proposal by the Federal Council is expected to be submitted to the Swiss Parliament in spring 2018. The effect of the proposed reform on UBS will depend on the final federal legislation and the subsequent cantonal implementation.

## Financial services regulation

### Implementation of margin requirements for non-cleared OTC derivatives

The G20 commitments on derivatives call for adoption of mandatory exchange of initial and variation margin for non-cleared over-the-counter (OTC) derivative transactions (margin rules). Margin rules for the largest counterparties have been in effect in major jurisdictions since early 2017, with phase-in periods, by counterparty size, lasting through 2020. In September 2018, initial margin requirements will apply to the next group of counterparties (phase 3) in the US, the EU, Switzerland, Japan and other major jurisdictions in Asia Pacific. These requirements, along with differences in the timing of implementation across jurisdictions, will likely continue to require ongoing operational effort by us and our clients.

### Developments related to the implementation of MiFID II / MiFIR

In the EU, the revised Markets in Financial Instruments Directive and the associated Regulation (MiFID II / MiFIR) took effect on 3 January 2018. MiFID II, among other things, introduces substantial new regulation of exchanges and trading venues, including new pre-trade and post-trade transparency requirements, a ban on the practice of using commission on transactions to compensate for research services and substantial new conduct requirements for financial services firms when dealing with clients.

In December 2017, the European Commission made equivalence determinations for trading venues in Switzerland, the US, Australia and Hong Kong. The equivalence decisions were necessary to permit EU-domiciled institutions and clients to continue to execute transactions on non-EU-domiciled trading venues. The Swiss equivalence decision is limited to one year and is linked to the progress of negotiations on the future establishment of an EU-Swiss institutional agreement. Compliance with the new requirements has required significant investment and changes to operations for us, our clients and other financial services firms. Given the scale of the change and, in some cases, the short time between finalization of requirements and the effective date, we expect that the changes introduced by MiFID II will result in changes to relevant markets

and businesses, which may include a reduction in commission rates and trading margins. We continue to assess the effect on our businesses, in particular the requirement to price research and execution services separately, and whether these changes affect the timing of recognition of certain fee income.

### Developments related to LIBOR benchmarks and other benchmarks and reference rates

Efforts to transition from the London Interbank Offered Rate (LIBOR) benchmarks to alternative benchmark rates are under way in several jurisdictions. The UK Financial Conduct Authority announced in July 2017 that it will not intervene beyond 2021 to sustain LIBOR and urged users to plan the transition to alternative reference rates. In April 2017, the Working Group on Sterling Risk-Free Reference Rates selected the Sterling Overnight Index Average as the recommended British pound risk-free rate. In the US, the Alternative Reference Rates Committee has recommended a broad Treasuries repo financing rate as the new US dollar secured risk-free rate, which is expected to be available in 2018. The Federal Reserve Bank of New York has launched a consultation on the construction of this and two other Treasury repurchase agreement-derived rates. The European Central Bank (ECB) has also recently announced its decision to develop, before 2020, a euro unsecured overnight interest rate based on transaction data already reported to the ECB by banks.

From 1 January 2018, the EU Benchmarks Regulation (EBR) became fully applicable. The EBR regulates the administration of, contribution to and usage of benchmarks falling within the scope of the regulation. The regulation covers benchmarks on interest rates, currencies, securities, commodities and indices as well as on other reference prices.

UBS has significant contractual rights and obligations referenced to LIBOR and other benchmark rates. Discontinuance of, or changes to, benchmark rates as a result of these developments or other initiatives or investigations, as well as uncertainty about the timing and manner of implementation of such changes or discontinuance, may require adjustments to agreements that are referenced to current benchmarked rates by us, our clients and other market participants as well as to our systems and processes.

### Developments related to recovery and resolution

A number of developments have further shaped the regulatory framework on recovery and resolution for banks.

In Switzerland, FINMA published a partial revision of its Banking Insolvency Ordinance, which became effective on 1 April 2017. The amendments require banks to include a contractual acknowledgment of FINMA's ability to temporarily postpone the exercise of remedies against banks in financial contracts that are subject to foreign laws or foreign places of jurisdiction. Such postponement is intended to ensure the continuation of key contractual relationships without interruption in crisis situations. According to the revised ordinance, contracts entered into by non-Swiss entities within a group will only be subject to the rule if the respective financial contract was guaranteed or otherwise secured by a bank or securities dealer domiciled in Switzerland. In addition, FINMA has granted exceptions for contracts with individuals and extended the implementation period to April 2018 for contracts with banks and securities dealers, and to October 2018 for contracts with other counterparties.

In November 2017, similar rules on resolution stays were published in the United States by the Office of the Comptroller of the Currency. The rules address concerns relating to the exercise of default rights in financial contracts that could interfere with the orderly resolution of systemically important financial institutions.

In the UK, in July 2017, the Bank of England (BoE) consulted on its policy for setting minimum requirements for own funds and eligible liabilities (MREL) within groups. It proposes to require internal MREL at between 75% and 90% of the Pillar 1 external MREL requirement, which will be phased in between 1 January 2019 and 1 January 2022. The BoE also proposes to take into account the equivalent requirements used in other jurisdictions, which could result in a required internal MREL level at the higher end of the range. We expect that UBS Limited will be subject to these requirements. In addition, firms would need to hold loss-absorbing capacity for operational continuity for each provider of critical services within the group calibrated at 25% of total operating costs. This proposal could apply to a number of UBS entities in different jurisdictions that provide services to UBS Limited and is expected to take effect on 1 January 2019. The exact impact of these changes can only be determined once the BoE finalizes its policy.

In November 2017, the Financial Stability Board opened consultations on bail-in execution and on funding in resolution. The consultation on bail-in proposes principles to make resolution strategies operational, including disclosures on the instruments and liabilities within the scope of bail-in, the valuation process, governance issues and market and creditor communications. The consultation on funding in resolution proposes guidelines to support the monitoring, reporting and estimation of funding needs in resolution and to facilitate execution of the funding strategy.

### Changes to the Swiss prudential regulatory framework

Regulators made further changes to strengthen the Swiss prudential regulatory framework and to align it with Basel III rules. Based on the biennial review of systemically important banks (SIBs) concluded in June 2017, the Swiss Federal Department of Finance (FDF) initiated a consultation in February 2018, proposing the introduction of gone concern requirements for domestically focused SIBs. These requirements would be conceptually similar to those in effect since July 2016 for the two largest Swiss banks, including UBS. However, they would be limited to 40% of the going concern capital requirements, would be phased in over seven years and could be met by a cantonal guarantee or similar mechanism.

In February 2018, the Swiss Federal Council proposed amendments to the participation relief provisions under current Swiss tax law that, if enacted, would reduce the additional tax burden on debt issuances by bank top holding companies. The proposed tax law changes would permit SIBs, such as UBS, to issue debt directly from their holding companies, as is contemplated under the international capital framework and the Swiss Capital Adequacy Ordinance, without incurring significant corporate tax disadvantages, as is the case today under Swiss tax law. As a next step, the proposal will be subject to debate in the Swiss Parliament.

Separately, Switzerland has been moving ahead with the implementation of existing Basel Committee on Banking Supervision (BCBS) standards. In October 2017, FINMA issued a consultation on the implementation of changes to Basel III rules, covering interest rate risk in the banking book, disclosure requirements, credit risk and eligible capital. These changes are expected to take effect on 1 January 2019. Also, the Swiss Federal Council adopted revisions to the Capital Adequacy Ordinance that will introduce a more restrictive treatment of risk concentrations. From 1 January 2019, risk concentration limits for exposures with global systemically important banks will be lowered and calculated on the basis of tier 1 capital, excess capital will no longer be able to be used to compensate for exposures above the limit and the standardized approach for calculation of exposures will be required. In addition, direct and indirect exposures will need to be aggregated at counterparty level.

#### Swiss Federal Council proposes changes to the depositor protection scheme

In February 2017, the Swiss Federal Council proposed changes to the Swiss depositor protection scheme. The proposed changes include introducing a target level for depositor protection, set at 1.6% of the value of the protected deposits in the Swiss financial system, using the current cap of CHF 6 billion as a floor, and significantly shortening the time within which payments to depositors must be made in the event of a bank insolvency. These changes would replace the current requirement that each bank has to hold 50% of its commitment to the depositor protection scheme as high-quality liquid assets with a requirement to pledge collateral equal to 50% of its commitment. The Federal Council also intends to issue new rules for banks to segregate custody assets from own assets through the entire domestic custody chain. The proposed changes may require UBS to make adjustments to operational processes and funding. The FDF is expected to issue a draft consultation by the end of August 2018.

#### Finalization of the Basel III capital framework

In December 2017, the BCBS announced the finalization of the Basel III reforms. The most significant changes include:

- placing floors on certain model inputs under the internal ratings-based (IRB) approach to calculate credit risk risk-weighted assets (RWA);
- requiring the use of standardized approaches for calculation of credit valuation adjustment and for operational risk RWA;
- placing an aggregate output floor on the Group RWA equal to 72.5% of the RWA calculated using a revised standardized approach; and
- revising the leverage ratio denominator (LRD) calculation and introducing a leverage ratio surcharge for global systemically important banks.

The revised standards will take effect from 1 January 2022, with a phase-in period of five years for the aggregate output floor.

We currently estimate that the introduction of the revised Basel III framework will likely lead to a net increase in RWA of around CHF 35 billion, before taking into account mitigation actions. These estimates are based on our current understanding of the relevant standards and may change as a result of new or changed regulatory interpretations, implementation of the Basel III standards into national law, changes in business growth, market conditions and other factors. We will update our common equity tier 1 (CET1) ratio guidance when further details on the implementation of the final Basel III standards become available.

In addition, over the next three years, as a result of other known regulatory changes and estimated business growth, we estimate our RWA may increase by around CHF 40 billion and our LRD may rise by around CHF 85 billion. Actual increases may vary depending on growth opportunities, market conditions and mitigation actions. As a consequence, and based on the estimates above, we may build approximately CHF 4 billion of additional fully applied CET1 capital over the next three years, subject to market conditions, as well as RWA and LRD development.

- **Refer to the “Capital management” section of this report for more information on the current Swiss SRB capital framework**
- **Refer to the “Risk factors” section of this report for more information on regulatory change**

# Significant accounting and financial reporting changes in 2018

## IFRS 9, *Financial Instruments*

We adopted IFRS 9, *Financial Instruments* from 1 January 2018. IFRS 9 imposes expected credit loss (ECL) requirements that change the accounting and reporting for the majority of our credit exposures. Additionally, IFRS 9 introduces new classification and measurement guidelines that require a consideration of the contractual cash flow characteristics of financial assets and the associated business models under which we operate, and eliminate, among other things, the previous accounting and reporting treatment of investments classified as available for sale and held to maturity.

We also early adopted the Amendment to IFRS 9, *Prepayment Features with Negative Compensation*, which allows us to continue to apply amortized cost accounting to Swiss private mortgages and corporate loans that provide for two-way compensation if a prepayment occurs. We did not adopt the optional IFRS 9 hedge accounting requirements pending completion of the International Accounting Standards Board's (IASB) project on macro hedge accounting strategies.

We will recognize the estimated pre-tax transition impact from adopting IFRS 9 of approximately CHF 0.7 billion, as well as a tax credit of CHF 0.1 billion, as a CHF 0.6 billion reduction in our IFRS consolidated equity as of 1 January 2018, which will be reflected in our first quarter 2018 report. Approximately half of this amount is attributable to mark-to-market adjustments on certain loans and securities that no longer qualify for amortized cost accounting due to their cash flow characteristics or underlying business model. These instruments will now be measured at fair value through profit or loss under IFRS 9. The remainder of the reduction results from recognizing ECL, primarily on financial assets measured at amortized cost, financial guarantees and loan commitments.

Our fully applied common equity tier 1 (CET1) capital is expected to be reduced by approximately CHF 0.3 billion as of 1 January 2018, predominantly due to the reclassification of certain loans and securities from amortized cost to fair value through profit or loss, with no material impact on our capital ratios.

→ Refer to "Note 1c International Financial Reporting Standards and Interpretations to be adopted in 2018 and later and other changes" in the "Consolidated financial statements" section of this report for more information

## Transition

IFRS 9 is a key strategic initiative for UBS and has been implemented under the joint sponsorship of the Group Chief Financial Officer and the Group Chief Risk Officer. As part of our implementation program, we have performed an assessment of the population of financial instruments impacted by the classification and measurement requirements of IFRS 9 and

developed an impairment methodology to support the calculation of the ECL allowance.

Our ECL calculation, including the processes to derive appropriate forward-looking information, and the related reporting processes and controls have been tested through parallel runs.

Detailed transition disclosures, including a full reconciliation on the changes arising from adopting IFRS 9, will be provided in our first quarter 2018 report.

## Classification

IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, at fair value through other comprehensive income (OCI) or at fair value through profit or loss, based on the business model for managing the respective assets and their contractual cash flow characteristics.

## Expected credit losses

IFRS 9 introduces a forward-looking ECL approach, which is intended to result in an earlier recognition of credit losses compared with the incurred-loss impairment approach for financial instruments under IAS 39, *Financial Instruments: Recognition and Measurement* and the loss-provisioning approach for financial guarantees and loan commitments under IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. The new impairment model applies to financial assets measured at amortized cost, investments in debt instruments measured at fair value through OCI, lease receivables, loan commitments and financial guarantee contracts that are not measured at fair value through profit or loss. The majority of the ECL calculated as of the transition date relates to our private and commercial mortgage portfolio in Switzerland within our Personal & Corporate Banking division. Under IFRS 9, a maximum 12-month ECL must be recognized from initial recognition on in-scope instruments, referred to as instruments within stage 1. Lifetime ECL must be recognized if a significant increase in credit risk (SICR) arises after the instrument was originally recognized, referred to as instruments in stage 2, or if the instrument is credit impaired, referred to as instruments in stage 3.

## Measurement of expected credit losses

The methodology we apply to calculate an individual probability-weighted unbiased ECL in line with IFRS 9 is aligned with the complexity, structure and risk profile of relevant portfolios and is mainly based on a combination of the following principal factors: probability of default (PD), loss given default (LGD), exposure at default (EAD) and discounting to the reporting date, with respective parameters generally determined on a transaction basis.

PDs and LGDs used in the IFRS 9 ECL calculation are point in time (PIT) based. To derive the PIT-based parameters, we leverage our existing Pillar 1 internal ratings-based (IRB) models and Pillar 2 stress loss models. We make certain necessary adjustments to account for current conditions and to incorporate forward-looking economic information, which includes gross domestic product forecasts, interest and foreign exchange rates, unemployment rates, real estate price indices and other relevant risk parameters. In addition, the prudential adjustments from Basel III, such as downturn LGD assumptions and floors, are removed.

We have selected a range of scenarios (upside, baseline, mild downside, and downside) to capture material non-linearity and asymmetries between different possible forward-looking scenarios and associated credit losses, and we apply scenario weights to reflect the likelihood of their occurrence. We have aligned our baseline scenario selection with the baseline used for business planning purposes.

For ECL calculation purposes, we consider the maximum contractual period over which we are exposed to credit risk, taking into account the respective counterparty's contractual extension, termination and prepayment options. For certain credit card facilities without a defined contractual end date, which are callable on demand and where the drawn and undrawn portions are managed as one unit, the period over which UBS is exposed to credit risk exceeds the contractual notice period and therefore this longer period is used within the ECL calculation.

#### *Determination of a significant increase in credit risk*

Qualitative and quantitative criteria are used to determine whether the credit risk on an instrument has significantly increased from the date of initial recognition, with the primary assessment based on a comparison of the annualized forward-looking and scenario-weighted lifetime PIT-based PDs at inception of the instrument, and at the reporting date. This assessment is made at an individual financial asset level, with specific criteria and thresholds applied based on the applicable portfolio. Qualitative factors are additionally considered, including internal indicators of credit risk such as days-past-due information, external market indicators of credit risk and general economic conditions. We generally consider that an SICR occurs no later than when the asset is 30 days past due.

Lombard loans, securities financing transactions and certain other asset-based lending transactions that are subject to daily risk management and monitoring processes with strict margining requirements are not subject to the SICR determination process given the transactions are closed out immediately if margin calls are not satisfied, whereupon they move directly from stage 1 into stage 3 as defaulted positions.

#### *Governance*

The incorporation of forward-looking information in the ECL calculation and the definition and assessment of what constitutes an SICR are inherently subjective and involve the use of significant judgment. Therefore, we have developed a front-to-back governance framework over the ECL calculation process jointly owned by the Group Chief Financial Officer and the Group Chief Risk Officer and have designed controls to be in compliance with the requirements of the Sarbanes-Oxley Act.

Our economists, risk methodology personnel and credit risk officers are involved in developing the forward-looking macroeconomic assumptions used in the ECL calculation. Assumptions and scenarios are validated and approved through a scenario committee and an operating committee, which have been established as part of a new governance process. This process also facilitates a consistent use of forward-looking information throughout UBS, including in our business planning process. New models have been approved as part of our existing model validation and oversight processes. Governance has also specifically been established around the SICR decision process given management judgment is required. We test ECL and SICR inputs in a controlled environment and determine sensitivities with a risk simulation engine.

#### *Group regulatory capital and IFRS 9*

The table on the next page sets out key differences in the scope and factors applied in determining expected losses (EL) under the current Basel III advanced internal ratings-based approach and those used in determining ECL for IFRS 9 purposes.

→ **Refer to "Credit risk models" in the "Risk management and control" section of this report for more information**

In March 2017, the Basel Committee on Banking Supervision (BCBS) finalized guidance on an interim approach for the regulatory treatment of accounting provisions and defined standards for transitional arrangements, following the introduction of IFRS 9. The BCBS confirmed that for an interim period the current treatment of accounting provisions, under both the standardized approach and the IRB approach, should continue to be applied until the longer-term treatment is confirmed. The BCBS recommended that jurisdictions issue guidance to categorize new accounting provisions as general provisions or specific provisions for regulatory purposes. Additionally, jurisdictions may implement transitional arrangements to spread the adoption impacts over time, using either a static or a dynamic approach, including limiting the transition period to a maximum of five years. The consultation period on the related FINMA guidance ended on 31 January 2018. It includes the option of phasing the initial effect of adopting the new accounting provisions into regulatory capital, using a static approach. The final guidance is expected to be published during 2018 with an effective date of 1 January 2019.

### Comparison of IFRS 9 ECL with Basel III EL

	Basel III (advanced internal ratings-based approach)	IFRS 9
<b>Scope</b>	The Basel III advanced internal ratings-based (A-IRB) approach applies to most credit risk exposures. It includes transactions measured at amortized cost, at fair value through profit or loss and at fair value through OCI, including loan commitments and financial guarantees.	The IFRS 9 expected credit loss calculation mainly applies to financial assets measured at amortized cost and debt instruments measured at fair value through OCI, as well as loan commitments and financial guarantee contracts not at fair value through profit or loss.
<b>12-month versus lifetime expected loss</b>	The Basel III A-IRB approach takes into account expected losses resulting from expected default events occurring within the next 12 months.	In the absence of an SICR event, a maximum 12-month ECL is recognized to reflect lifetime cash shortfalls that will result if a default event occurs in the 12 months after the reporting date (or a shorter period if the expected lifetime is less). Once an SICR event has occurred, a lifetime ECL is recognized considering expected default events over the life of the transaction.
<b>Exposure at default (EAD)</b>	EAD is the amount we expect a counterparty to owe us at the time of a possible default. For banking products, the EAD equals the book value as of the reporting date, whereas for traded products, such as securities financing transactions, the EAD is modeled. The EAD is expected to remain constant over the 12-month period. For loan commitments, a credit conversion factor is applied to model expected future drawdowns over the 12-month period, irrespective of the actual maturity of a particular transaction. The credit conversion factor includes downturn adjustments.	EAD is generally calculated on the basis of the cash flows that are expected to be outstanding at the individual points in time during the life of the transaction, discounted to the reporting date using the effective interest rate. For loan commitments, a credit conversion factor is applied to model expected future drawdowns over the life of the transaction without including downturn assumptions. In both cases the time period is capped at 12 months, unless an SICR has occurred.
<b>Probability of default (PD)</b>	PD estimates are determined on a through the cycle (TTC) basis. They represent historical average PDs, taking into account observed losses over a prolonged historical period, and are therefore less sensitive to movements in the underlying economy.	PD estimates will be determined on a PIT basis, based on current conditions and incorporating forecasts for future economic conditions at the reporting date.
<b>Loss given default (LGD)</b>	LGD includes prudential adjustments, such as downturn LGD assumptions and floors. Similar to PD, LGD is determined on a TTC basis.	LGD should reflect the losses that are reasonably expected and prudential adjustments should therefore not be applied. Similar to PD, LGD is determined on the basis of a PIT approach.
<b>Use of scenarios</b>	N/A	Multiple forward-looking scenarios have to be taken into account to determine a probability-weighted ECL.

**IFRS 9 and our significant regulated subsidiaries and sub-groups**  
FINMA's plan to implement ECL under Swiss GAAP has been deferred. We will continue to apply the incurred loss model in the UBS AG standalone and UBS Switzerland AG standalone financial statements, which are prepared in accordance with Swiss GAAP (FINMA Circular 2015 / 1 and the Banking Ordinance).

UBS Limited prepares standalone financial statements in accordance with IFRS, and adopted IFRS 9 on 1 January 2018.

UBS Americas Holding LLC expects to early adopt Accounting Standards Update (ASU) 2016-13, *Measurement of Credit Losses on Financial Instruments* on 1 January 2020 for its consolidated financial statements to align with the mandatory effective date for some of its subsidiaries.

### IFRS 15, Revenue from Contracts with Customers

We adopted IFRS 15, *Revenue from Contracts with Customers* from 1 January 2018. The new standard will affect when certain revenue can be recognized, with some performance-based fees in Asset Management and research revenues in the Investment Bank deferred until it is certain that the fee has been earned. In addition, IFRS 15 requires a change to the presentation of certain revenues and expenses in the income statement, with enhanced disclosures. The cumulative effect of initially applying the standard will be recognized as an adjustment to our IFRS

consolidated equity as of 1 January 2018 and, as permitted by the standard, we will not restate prior-period information. The transition effect will not be material and we also do not expect a material effect on the Group's annual revenues and expenses going forward.

### Potential change of functional and presentation currency

In light of cumulative changes in our legal structure, business activities and evolving changes to our structural currency management strategy, we anticipate that during the second half of 2018 we may conclude under IAS 21, *The Effects of Changes in Foreign Exchange Rates*, that the functional currency of UBS Group AG and UBS AG's Head Office in Switzerland will change from Swiss francs to US dollars, and the functional currency of UBS AG's London Branch operations will change from British pounds to US dollars, where such changes would be made on a prospective basis. If such determinations are made, we would also expect to change the presentation currency of UBS Group AG's consolidated and UBS AG's consolidated financial statements from Swiss francs to US dollars, with prior periods restated. Assets, liabilities and total equity would be converted to US dollars at historic closing rates prevailing on the respective balance sheet dates. No material changes are expected to our capital ratios nor are material changes expected to our other key performance indicators.

# Our strategy

## Who we are

### The world's largest and only truly global wealth manager

Our strategy is centered on our leading Global Wealth Management business and our premier universal bank in Switzerland, which are enhanced by Asset Management and the Investment Bank. We focus on businesses that have a strong competitive position in their targeted markets, are capital efficient and have an attractive long-term structural growth or profitability outlook. We are the world's largest and only truly global wealth manager. We have a strong presence in the largest market, the United States, and a leading position in the fastest-growing regions, including Asia Pacific and the other emerging markets. Our wealth management business benefits from significant scale in an industry with attractive growth prospects and increasingly high barriers to entry, and from its leading position across the attractive high net worth and ultra high net worth client segments. We are the preeminent universal bank in Switzerland, the only country where we operate in all of our business lines: wealth management, personal & corporate banking, asset management and investment banking. Our leading position in our home market is central to UBS's global brand and profit stability. The partnership between our wealth management business and our other business divisions is a key differentiating factor and a source of competitive advantage.

### Strong capital position and capital-efficient business model

Capital strength is the foundation of our strategy and provides another competitive advantage. We are well positioned to meet the fully applied Swiss too big to fail capital and total loss-absorbing capacity requirements when they become effective on 1 January 2020. Our capital-accretive and capital-efficient business model helps us adapt to changes in regulatory requirements, while pursuing growth opportunities without the need for significant earnings retention. We believe that our business model can generate an adjusted return on tangible equity (excluding deferred tax expense / benefit and deferred tax assets) of around 15% in normal market conditions.

### We have an attractive and flexible capital returns policy

Our earnings capacity and capital efficiency support our objective to deliver sustainable and increasing capital returns to our shareholders. We aim to increase our ordinary dividend per share at a mid-to-high single-digit percent per annum. We may also return excess capital, after accruals for ordinary dividends, most likely in the form of share repurchases, after considering our outlook and subject to regulatory approval.

## Our priorities

### 1. Drive profitable growth in Global Wealth Management

In Global Wealth Management, we target 10–15% adjusted profit before tax growth annually over the cycle, while growing net new money at 2–4% per annum and aiming to operate within an adjusted cost / income ratio range of 65–75%. The creation of the integrated business division on 1 February 2018 aims to further enhance the client experience and our product offering in line with an increasingly global client base. We expect to more effectively capture the purchasing power of Global Wealth Management's CHF 2.3 trillion invested asset base and generate greater synergies across technology, innovation and other areas of investment. Regional variations in the client service model will be maintained, while middle- and back-office functions will be more closely aligned and integrated.

### 2. Maintain focused leadership and grow profits in Asset Management, Investment Bank and Personal & Corporate Banking

Our strength in Global Wealth Management also relies on the stand alone strength of our other businesses. Together, they make a significant contribution to earnings, diversify revenues and generate high-quality returns.

### 3. Enhance diversification by capturing superior growth in Asia Pacific and the Americas, leverage our Europe, Middle East and Africa capabilities and reinforce our leadership position in Switzerland

From a geographic standpoint, we aim to grow in the Americas and to reinforce leadership in our home market in Switzerland. In Europe, Middle East and Africa, we want to leverage our capabilities to grow our market share during likely consolidation. Asia Pacific, and particularly China, presents a significant growth opportunity, given the economic expansion and rate of increase in the number of billionaires. UBS's competitive position in Asia Pacific is strong and we are well positioned to capture opportunities in the region across our businesses.

### 4. Invest in technology with a focus on superior client experience, product capabilities, efficiency and effectiveness

We will continue to invest in technology to drive growth, better serve our clients and improve efficiency and effectiveness. We intend to secure our position as a leader in the digital age by maintaining expenditure on technology of at least 10% of the Group's revenues for the foreseeable future.



## Performance targets and capital guidance 2018–2020

The table below shows our performance targets and capital guidance for the Group and the business divisions for the 2018–2020 period. The targets and guidance reflect what we believe can be achieved in normal market conditions.

All targets are measured on an annual basis, except our adjusted profit before tax growth targets for Global Wealth Management and Asset Management, which represent the average annual growth we aim to deliver over the cycle.

- Refer to the “Group performance” section of this report for more information on adjusted results and adjusting items
- Refer to the “Measurement of performance” section of this report for more information on key performance indicators
- Refer to the “Risk factors” section of this report for more information on factors that may affect our ability to deliver on our strategy

	Cost / income ratio <sup>1</sup>	Profitability and growth <sup>1</sup>	Capital and resource guidance
<b>Group</b>	<75%	~15% RoTE excluding DTAs <sup>2</sup>	~13% common equity tier 1 capital ratio <sup>3</sup> ~3.7% common equity tier 1 leverage ratio <sup>3</sup>
<b>Global Wealth Management</b>	65–75%	10–15% pre-tax profit growth <sup>4</sup> 2–4% net new money growth	
<b>Personal &amp; Corporate Banking</b>	50–60%	1–4% net new business volume (personal banking) 150–165 bps net interest margin	
<b>Asset Management</b>	60–70%	~10% pre-tax profit growth <sup>4, 5</sup> 3–5% net new money growth, excluding money market flows	
<b>Investment Bank</b>	70–80%	>15% RoAE <sup>6</sup>	RWA and LRD around one-third of the Group total <sup>7</sup>

<sup>1</sup> Annual targets; cost / income ratio, pre-tax profit growth and return targets are on an adjusted basis. <sup>2</sup> Return on tangible equity (RoTE) excluding deferred tax expense / benefit and deferred tax assets (DTAs); calculated as adjusted net profit / loss attributable to shareholders excluding deferred tax expense / benefit, such as the net write-down due to the Tax Cuts and Jobs Act (TCJA) enacted in the fourth quarter of 2017, divided by average tangible equity attributable to shareholders excluding any DTAs that do not qualify as fully applied CET1 capital. <sup>3</sup> Based on fully applied CET1 capital. <sup>4</sup> Over the cycle. <sup>5</sup> Excluding the impact of business exits. <sup>6</sup> Return on attributed equity. <sup>7</sup> Including risk-weighted assets (RWA) and leverage ratio denominator (LRD) directly associated with activity that Corporate Center – Group ALM manages centrally on the Investment Bank’s behalf; proportion may fluctuate around this level due to factors such as equity market levels and FX rates.

# Measurement of performance

## Performance measures

### Key performance indicators

The Group and business divisions are managed on the basis of a key performance indicator (KPI) framework, which identifies profit and growth financial measures, in the context of sound risk and capital management objectives. When determining variable compensation, both Group and business division KPIs are taken into account.

We review the KPI framework on a regular basis, considering our strategy and the market environment in which we operate.

KPIs are disclosed in our quarterly and annual reporting to allow comparison of our performance over the reporting periods. For certain KPIs we have performance targets in place, which are defined in order to measure our performance against our strategy. Our KPIs are designed to be assessed on an over-the-cycle basis and are subject to seasonal patterns.

→ **Refer to the “Our strategy” section of this report for more information on performance targets**

### Changes to our key performance indicators in 2018

We reviewed our performance targets and KPI framework in January 2018, taking into account the developments in the regulatory environment and the achievement of our CHF 2.1 billion net cost reduction target by the fourth quarter of 2017. We will introduce “Common equity tier 1 leverage ratio (%)” as a KPI for the Group alongside the existing “Going concern leverage ratio (%)” KPI. The existing “Return on tangible equity (RoTE) (%)” KPI will be complemented by “RoTE excluding deferred tax assets (RoTE ex DTAs) (%)”.

“Gross margin on invested assets (bps)” for the Group, Wealth Management and Asset Management will be removed from the KPI framework as this will no longer be used as a strategic steering metric. Cost control will remain in focus through the cost / income ratio, which remains a KPI and performance target for the Group and all business divisions.

From 1 February 2018, performance targets and KPIs for Wealth Management and Wealth Management Americas were merged and are reported for the Global Wealth Management business.

**2017 Group and business division key performance indicators**

Key performance indicators	Definition	Group	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank
Net profit growth (%)	Change in net profit attributable to shareholders from continuing operations between current and comparison periods / net profit attributable to shareholders from continuing operations of comparison period	●					
Pre-tax profit growth (%) <sup>1</sup>	Change in business division operating profit before tax between current and comparison periods / business division operating profit before tax of comparison period		●	●	●	●	●
Cost / income ratio (%)	Operating expenses / operating income before credit loss (expense) or recovery	●	●	●	●	●	●
Return on tangible equity (RoTE) (%) <sup>2</sup>	Net profit attributable to shareholders before amortization and impairment of goodwill and intangible assets (annualized as applicable) / average equity attributable to shareholders less average goodwill and intangible assets	●					
Return on attributed equity (RoAE) (%) <sup>2</sup>	Business division operating profit before tax (annualized as applicable) / average attributed equity						●
Going concern leverage ratio (%) <sup>3</sup>	Total going concern capital / leverage ratio denominator as of period end	●					
Common equity tier 1 capital ratio (%) <sup>3</sup>	Common equity tier 1 capital / risk-weighted assets as of period end	●					
Net new money growth (%)	Net new money for the period (annualized as applicable) / invested assets at the beginning of the period. Group net new money growth is reported as net new money growth for combined wealth management businesses. Asset Management net new money excludes money market flows	●	●	●		●	
Gross margin on invested assets (bps) <sup>2, 4</sup>	Operating income before credit loss (expense) or recovery (annualized as applicable) / average invested assets		●	●		●	
Net margin on invested assets (bps) <sup>2</sup>	Business division operating profit before tax (annualized as applicable) / average invested assets		●	●		●	
Net new business volume growth for personal banking (%)	Net new business volume (i.e., total net inflows and outflows of client assets and loans) for the period (annualized as applicable) / business volume (i.e., total of client assets and loans) at the beginning of the period				●		
Net interest margin (%)	Net interest income (annualized as applicable) / average loans				●		
Cost reduction <sup>4</sup>	Net exit rate cost reduction	●					

<sup>1</sup> Excluding the impact of business exits, for Asset Management only. <sup>2</sup> Denominator based on a five-point average of quarter-end values with the beginning and end values weighted with a factor of 0.5 for the full-year calculations and based on a simple average for the quarterly calculations. <sup>3</sup> Based on fully applied CET1 capital. <sup>4</sup> Removed from the key performance indicator framework in 2018.

**New key performance indicators in 2018**

Key performance indicators	Definition	Group	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank
Return on tangible equity excluding deferred tax assets (RoTE ex DTAs) (%) <sup>1, 2</sup>	Adjusted net profit attributable to shareholders before amortization and impairment of goodwill and intangible assets and before deferred tax expense / benefit (annualized as applicable) / average equity attributable to shareholders less average goodwill and intangible assets and less average deferred tax assets that do not qualify as fully applied CET1 capital	●				
Common equity tier 1 leverage ratio (%) <sup>3</sup>	Common equity tier 1 capital / leverage ratio denominator as of period end	●				

<sup>1</sup> Excluding deferred tax expense / benefit such as the net write-down due to the Tax Cuts and Jobs Act enacted in the fourth quarter of 2017. <sup>2</sup> Denominator based on a five-point average of quarter-end values with the beginning and end values weighted with a factor of 0.5 for the full-year calculations and based on a simple average for the quarterly calculations. <sup>3</sup> Based on fully applied CET1 capital.

# Global Wealth Management

## Integration of our wealth management businesses

On 1 February 2018, Wealth Management and Wealth Management Americas were combined into the unified business division Global Wealth Management. The creation of the integrated business division aims to further enhance our superior client experience and product offering in line with an increasingly global client base. Global Wealth Management provides our clients with broader access to more diversified global products and services and an integrated multi-shore offering. Our clients benefit from the scale and insights of a truly global business, while we retain the distinct client service models that we believe are best suited to each of the regions in which we operate. We believe that our platform, combined with a global suite of products and services, bolsters our ability to attract the strongest investment talent, both inside and outside of UBS, to best serve our clients. We want to leverage our scale to generate greater synergies through joint investments in technology, new products, new business lines and our people.

## Business

Global Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world. Our clients benefit from the full spectrum of resources that a global firm can offer, including investment management, wealth planning, banking and lending, and corporate financial advice. Our model gives clients access to a wide range of products from the world's leading third-party institutions that complement our own offerings.

## Strategy and clients

We are the global leader in wealth management for private clients, particularly in the ultra high net worth and high net worth segments.

We seek to capitalize on our market-leading position in the ultra high net worth business and to increase our market share considerably in this segment. We also invest significantly in growing our high net worth and core affluent businesses.

Wealth planning, investment management and portfolio construction are at the heart of our offering. We aspire to provide our clients with a wider selection of discretionary and advisory services, helping them to more effectively achieve their goals. This in turn would further increase our mandate penetration and contribute to higher recurring revenues. Where possible, our integrated client service model allows us to bundle capabilities across the Group to identify investment opportunities in varying market conditions and create solutions that suit individual client

needs. For example, ultra high net worth clients benefit from tailored institutional coverage and global execution provided by dedicated specialist teams from Global Wealth Management and the Investment Bank through the Global Family Office Group.

We continue to invest in our digital capabilities to offer clients a combination of market-leading investment advice tailored to their personal goals and innovative digital service solutions.

We have unique scale and a global footprint with booking centers across the globe. These give us a strong local presence allowing us to serve our clients and book their assets in multiple locations, according to client preferences.

In Asia Pacific, we have further strengthened our position as the largest wealth manager. Capturing growth opportunities in China is central to our strategy. We have accelerated our growth and expanded our business across the region, with a particular focus on Hong Kong and Singapore, as well as onshore markets, for example, Japan, China and Taiwan.

The Americas region covers both North America and Latin America. In North America, we continue to execute on our distinct opportunity to “feel small and play big” by combining the agility of a boutique firm with all of the capabilities of a premier, truly global wealth manager. We continue to execute on our operating model to move decision-making closer to clients, better leverage global capabilities and invest in next-generation technology. We expect these efforts to enable us to achieve higher levels of client satisfaction, strengthen our client relationships, increase productivity of our financial advisors and support the organic growth of our franchise. In Latin America, we continue to leverage our global booking model capabilities. We regularly assess our local presence to ensure proximity to our clients in key markets and to make sure we meet our clients' needs for global diversification and local offerings. In 2017, we enhanced our presence in Brazil with the acquisition of Consenso Investimentos, the country's largest independent multi-family office. This transaction demonstrates our long-standing strategic priority to grow in this key market.

In Europe, Middle East and Africa, our Western Europe business has a long-established local presence in all major markets. In 2017, and early 2018, we announced the acquisition of businesses in Europe that are complementary to our strategy. The acquisition will enable us to grow our presence in Europe and further build our position as a key wealth manager for Nordic clients in Europe. In line with our strategy to focus on our main markets, we sold our domestic wealth management operations in the Netherlands in August 2017. Outside Western Europe, we focus on key emerging markets, for example, Russia, Turkey and Israel.

In Switzerland, we collaborate closely with our colleagues in Personal & Corporate Banking, Asset Management and the Investment Bank. This creates opportunities to expand our business through client referrals and generates efficiencies by enabling us to use UBS's extensive branch network.

We evaluate our performance against key performance indicators and our respective targets.

- Refer to the **"Our strategy"** section of this report for information on our performance targets
- Refer to the **"Measurement of performance"** section of this report for information on our key performance indicators

## Products and services

Our approach to clients focuses on understanding their financial objectives and providing solutions tailored to their individual needs. Clients benefit from a comprehensive set of capabilities and expertise, including wealth planning, investing, lending, protection, philanthropy and corporate and banking services. Investment management is a core component of this value proposition.

Our global Chief Investment Office (CIO) draws on approximately 200 analysts, strategists, and investment professionals present in 10 key financial hubs globally and leverages access to buy-side partners and client networks. Seeking to add alpha to our clients' portfolios, the CIO provides clear, independent investment views, known as the UBS House View.

The UBS House View identifies and communicates investment opportunities and market risks to help protect and grow our clients' wealth over generations. We apply it to our clients' portfolios and asset allocations, and it underpins the investment strategies for our flagship discretionary mandates. The strategic asset allocation is an essential part of our disciplined style of managing our clients' wealth and strives to ensure that our clients remain on course to meet their financial goals over the long term. It is complemented by our tactical asset allocation, which uses our global expertise to help our clients navigate markets tactically and ultimately improve the risk and return trade-off potential of their portfolios.

Our Investment Platforms and Solutions (IPS) unit provides clients with portfolio-based investment advice and solutions in line with their overall investment goals. Clients can choose to delegate their investment decisions to our team of investment experts through a discretionary mandate. Those who wish to be more actively involved in their investment activities can choose to receive recommendations on an advisory basis. IPS seeks to ensure our solutions are in step with market conditions by

aligning our discretionary and advisory offerings with the UBS House View. Clients can invest in a full range of financial instruments, from single securities across asset classes to investment funds, structured products and alternative investments. Additionally, we offer our clients advice on structured lending and corporate finance.

We continue to develop innovative solutions to help our clients address the challenges of an increasingly complex financial world and to respond to their evolving needs. We have expanded our discretionary mandate solutions to meet specific client needs and preferences. We are also strongly committed to broadening our sustainable and impact investment offering. For example, in 2017, we offered our clients access to the Rise Fund, a private equity impact investment vehicle that aims to achieve measurable, positive social and environmental outcomes combined with competitive financial returns.

- Refer to the **"UBS and Society"** section of this report for more information on sustainable investing products and services

## Organizational structure

We are organized along regional lines, with our business areas being the Americas, including the US, Canada and Latin America; Europe, Middle East and Africa; Asia Pacific; Switzerland; and the business area for our global ultra high net worth clients.

We are governed by executive, risk and operating committees. In the US and Puerto Rico, we operate primarily through UBS Financial Services Inc. and UBS Financial Services Incorporated of Puerto Rico. Our banking services in the US include those conducted through UBS Bank USA, a Federal Deposit Insurance Corporation-insured depository institution subsidiary, and branches of UBS AG. Canadian wealth management and banking operations are conducted through UBS Bank (Canada). Outside North America and Puerto Rico, we mainly operate through UBS Switzerland AG and UBS AG branches. In Europe, we further operate through UBS Europe SE. We have a presence in more than 40 countries.

## Competitors

Our main competitors include the private banking operations of BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, HSBC, JPMorgan Chase, Julius Baer, and the large US-based wirehouses Morgan Stanley, Bank of America Merrill Lynch and Wells Fargo, in addition to the banks and independent financial advisors in each market we operate.

# Personal & Corporate Banking

## Business

As the leading personal & corporate banking business in Switzerland, we provide comprehensive financial products and services to private, corporate and institutional clients in Switzerland. We are among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Our business is central to UBS's universal bank delivery model in Switzerland. We work with the Group's wealth management, investment bank and asset management businesses to help our clients receive the best products and solutions for their specific financial needs. We are also an important source of growth for these business divisions through client referrals. In addition, we manage a substantial part of UBS's Swiss infrastructure and banking products platform, both of which are leveraged across the Group.

Our distribution model is based on a multi-channel strategy. With a steadily rising number of users and client interactions for our digital banking offering, we continue to strengthen our position as the leading multi-channel bank in Switzerland.

## Strategy and clients

Our strategy focuses on promoting profitable growth while continuously improving our banking services for clients within Switzerland. To achieve this, we have launched Client Experience 2020, our strategic digitalization program, which aims to strengthen our position as the leading universal bank in Switzerland and enhance our digital leadership position.

In the personal banking business, we aspire to be the bank of choice for private clients in Switzerland. Currently, we serve one in three Swiss households through our branch network, customer service centers and digital banking services. We continue to pursue our strategy of moderately and selectively growing our business in high-quality loans and endeavor to expand our multi-channel offering.

In the corporate and institutional business, we want to be our clients' main bank. We aim to continuously improve our profitability and capital efficiency, striving to expand our market share in Switzerland, centered on cash flow-based lending and our strategic advisory and trading business. Additionally, we are selectively expanding our offering at our international hubs to

serve Swiss-based corporate clients operating globally. We also assist our Swiss-based corporate clients with sustainability measures, such as the energy check-up offered by the Energy Agency of the Swiss Private Sector (EnAW), that contribute toward enhancing energy efficiency, thereby reducing operating costs.

Our clients value their relationship with us and our efforts to provide them with superior service. In 2017, for the sixth consecutive year, the international finance magazine *Euromoney* named UBS Best Bank in Switzerland, recognizing our experience, client centricity, focus on innovation, and the quality of our employees. Additionally, and for the seventh consecutive year, UBS was rated Best Domestic Cash Manager Switzerland based on a survey of cash managers and chief financial officers.

Continuous employee development, including client advisor certification, is a crucial element of our divisional strategy, as this is our key to providing superior client service.

Moreover, we continuously strive to simplify structures and processes in order to improve client experience without compromising our risk standards.

We evaluate our performance against key performance indicators and our respective targets.

- Refer to the "Our strategy" section of this report for more information on our performance targets
- Refer to the "Measurement of performance" section of this report for information on our key performance indicators
- Refer to the "UBS and Society" section of this report for more information on sustainable investing products and services

## Products and services

Our private clients have access to a comprehensive life cycle-based offering and convenient digital banking, targeting the specific needs of day-to-day banking, retirement and investment goals, and real estate transactions.

Our corporate and institutional clients benefit from our financing and investment solutions, notably regarding access to equity and debt capital markets, syndicated and structured credit, private placements, leasing and traditional financing. Our transaction banking offers solutions for payment and cash management services, trade and export finance, receivable finance, as well as global custody solutions to institutional clients.

In 2017, we implemented a number of product and service innovations:

- Remote Expert: a videoconferencing tool that allows clients to interact with our product specialists in areas such as trade finance or cash management.
- Improvements to the UBS account opening app: clients can now open an account via smartphone using video identification and use paperless signing with a qualified electronic signature for various services, including credit card applications.
- Liquidity Cockpit: a product that uses specific business software to help small businesses manage their liquidity.
- KeyPort: a connectivity solution with multi-banking functionality for our midsize and larger corporate clients.
- UBS Atrium: a platform that intermediates between Swiss institutional investors looking to invest in mortgages and owners of investment properties seeking mortgage financing.

We collaborate closely with the Investment Bank to offer capital market and foreign exchange products, hedging strategies and trading capabilities, as well as corporate finance advice. Working with Asset Management, we also provide fund and portfolio management solutions.

### **Organizational structure**

Our divisional business is organized into Personal Banking and Corporate & Institutional Clients, and is the core of Region Switzerland, which in addition contains Wealth Management Switzerland, the Investment Bank Switzerland and Asset Management Switzerland. The Swiss network includes around 280 branches, covering 10 geographical regions.

We are governed by executive, risk and operating committees and operate mainly through UBS Switzerland AG.

### **Competitors**

In the Swiss retail business, our competitors include Credit Suisse, PostFinance, Raiffeisen, the cantonal banks and other regional and local Swiss banks.

In the Swiss corporate and institutional business, our main competitors are Credit Suisse, the cantonal banks and globally active foreign banks in Switzerland.

# Asset Management

## Business

Asset Management is a large-scale and diversified asset manager, with an onshore presence in 23 countries. We offer investment capabilities and investment styles across all major traditional and alternative asset classes, as well as platform solutions and advisory support, to institutions, wholesale intermediaries and wealth management clients around the world.

## Strategy and clients

We aim to drive profitable and sustainable growth in key markets in Europe, Switzerland, the Americas and Asia Pacific, including China, where we continue to expand our long-standing presence. In 2017, Asset Management was granted a Private Fund Management license in China, allowing us to develop and offer onshore investment products for Chinese institutional and high net worth investors, through our wholly foreign-owned enterprise UBS Asset Management (Shanghai) Limited.

To achieve our goals, we seek to strengthen our institutional business and to accelerate the growth of our wholesale business. Collaboration with UBS's wealth management business to provide best-in-class products and services to meet private clients' needs continues to be a core component of our strategy.

We have defined our strategic growth and efficiency priorities with an overarching goal to deliver holistic investment and platform solutions to our clients, by leveraging our global reach and investment expertise.

To enable us to better leverage our best investment processes, tools and systems to generate alpha and offer holistic solutions for clients, we brought together our Equities, Fixed Income, Solutions and single-manager hedge fund capabilities in 2017 to create an integrated business area named Investments. We also combined our Global Real Estate, Infrastructure and Private Equity businesses to form a new business area named Real Estate & Private Markets.

We continue to develop our well-established passive capabilities, including indexed strategies and exchange-traded funds (ETFs), where we are building on our strong position in Asia Pacific, Europe and Switzerland.

We are committed to integrating sustainability into our active investment capabilities, as part of our ambition to become a leading provider of sustainable solutions for sophisticated clients. We continue to enhance our proprietary sustainability database and toolset and have built a dedicated sustainability research team to work with our investment teams across asset classes.

To capture opportunities presented by the evolving needs of wholesale clients, we are focused on building strategic partnerships and expanding our platforms and advisory support capabilities. With this in mind, in late 2017, we brought together our three Platform Services businesses – Fondcenter, Fund Management Services and UBS Partner – under unified leadership within Client Coverage to best capture the growth opportunities globally and to facilitate closer collaboration across these capabilities.

To support our efforts to increase our operational efficiency, we continue to invest in our operating platform and simplify our organization. Notable developments in this regard are the establishment of a dedicated middle-office services function and the sale of our fund administration servicing units in Luxembourg and Switzerland to Northern Trust in 2017.

We evaluate our performance against key performance indicators and our respective targets.

- Refer to the **"Our strategy" section of this report for information on our performance targets**
- Refer to the **"Measurement of performance" section of this report for information on our key performance indicators**
- Refer to the **"UBS and Society" section of this report for more information on sustainable investing products and services**

## Products and services

We offer clients a wide range of investment products and services in different asset classes, which can be delivered, directly or through third-party banks and distributors, in the form of segregated, pooled or advisory mandates as well as registered investment funds in various jurisdictions.

Our traditional and alternative capabilities include:

- *Equities* – global, regional and thematic strategies, as well as high alpha, growth and quantitative styles.
- *Fixed Income* – global, regional and local market-based single-sector, multi-sector and extended-sector strategies, such as high-yield and emerging market debt, as well as unconstrained and currency strategies.
- *O'Connor* – a global, single-manager hedge fund platform, offering both multi-strategy and standalone capabilities.
- *Real Estate & Private Markets* – global and regional real estate equity and debt strategies; direct infrastructure investment in core infrastructure assets globally; and multi-manager real estate, infrastructure and private equity strategies in broadly diversified fund-of-funds portfolios.
- *Passive and Alternative Beta* – indexed, alternative beta and rules-based strategies across equities, fixed income, commodities, real estate and alternatives, with mainstream to highly customized benchmarks and various structures including ETFs, pooled funds, structured funds and mandates.



- *Sustainable & Impact Investing* – to meet investors' financial and sustainability goals, we offer a wide range of sustainable and impact investing strategies across asset classes, from environmental, social and corporate governance integration to impact investing including investment themes such as renewable energy, environmental stewardship, social integration, health care, resource efficiency and demographics.

In addition, our *Solutions* business offers:

- Global and regional asset allocation and currency investment strategies across the risk / return spectrum, including balanced, growth, income, risk-managed, and unconstrained strategies.
- Customized multi-asset solutions, advisory and fiduciary services, including risk-managed and structured strategies, pension risk management and outsourced Chief Investment Office services.
- Multi-manager hedge fund solutions and advisory services, and manager selection for traditional asset classes.

Our *Platform Services* business offers:

- Fondcenter: our leading fund platform in Europe and Switzerland connecting distribution partners with fund providers.
- Fund Management Services: offering fund management company, white-labeling and representative services.
- UBS Partner: our innovative modular platform providing banks with powerful tools and analytics to support their advisory offering and enable them to significantly enhance their end clients' experience.

## Organizational structure

Our business is organized by the products and services we offer, our business areas being: Client Coverage, Investments, Real Estate & Private Markets, Products & Solutions and the Chief Operating Officer area. Our business is driven out of eight main hubs: Chicago, Hong Kong, London, New York, Singapore, Sydney, Tokyo and Zurich. We are governed by executive, risk and operating committees.

## Competitors

Our main competitors include global firms with wide-ranging capabilities and distribution channels, such as Amundi, BlackRock, Deutsche Asset Management, Goldman Sachs Asset Management, Invesco, J.P. Morgan Asset Management, Morgan Stanley Investment Management and Schroders. Other competitors include firms with a specific market or asset class focus.

# Investment Bank

## Business

The Investment Bank provides investment advice, financial solutions and capital markets access in over 35 countries, with principal offices in all major financial centers. We serve corporate, institutional and wealth management clients across the globe and partner with our wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services, which also includes UBS Securities Research. Our specialist teams work closely together, complementing our global product offering with their regional expertise. This enables us to understand our clients and provide services tailored to their investment and financing needs.

## Strategy and clients

We aspire to provide best-in-class services and solutions to our corporate, institutional and wealth management clients, through an integrated, solutions-led approach, driven by our intellectual capital and leveraging our award-winning electronic platforms. With our client-centric business model, we partner with our wealth management, personal and corporate banking and asset management businesses, and we believe we are well positioned to provide our clients with market insight, global coverage of markets and products, and execution services.

Our focus remains on our traditional strengths in our advisory, capital markets, equities and foreign exchange businesses, complemented by a rates and credit platform, to deliver attractive and sustainable risk-adjusted returns. Using our powerful research and technology capabilities, we develop integrated solutions to support our clients as they adapt to evolving market structures, driven by changes to the regulatory, technological, economic and competitive landscape.

We continue to invest in talent and technology and to strengthen our operational risk framework. We continue to develop and foster a shared culture across the Investment Bank. In 2017, implementation of our technology plan remained critical in making our platform for clients more effective and simplifying our processes.

We operate a tightly controlled balance sheet, risk-weighted assets and leverage ratio denominator allocation process to support our goal of earning attractive returns on allocated capital. We evaluate our performance against key performance indicators and our respective targets.

- Refer to the “Our strategy” section of this report for more information on our performance targets and expectations
- Refer to the “Measurement of performance” section of this report for information on our key performance indicators

## Products and services

### Corporate Client Solutions

In Corporate Client Solutions, we advise our clients on strategic business opportunities and help them raise capital to fund their activities. Together with Investor Client Services, we offer a full-service solution, which includes the distribution and risk management of capital markets products and financing solutions. The main business lines are:

- *Advisory* consults clients on matters such as mergers and acquisitions, spin-offs, exchange offers, leveraged buyouts, joint ventures, exclusive sales, restructurings, takeover defense and corporate broking.
- *Equity Capital Markets* offers comprehensive equity capital-raising services, as well as related derivative products. This includes managing initial public offerings and private placements, as well as equity-linked transactions and other strategic equities solutions.
- *Debt Capital Markets* provides financing advice and helps clients raise various types of debt capital, as well as hedge the resulting exposures.
- *Financing Solutions* provides customized solutions across asset classes via a wide range of financing capabilities, including structured, real estate and special situations financing.
- *Risk Management* includes corporate lending and associated hedging activities.

### Investor Client Services

In Investor Client Services, we enable our clients to buy and sell securities on capital markets across the globe and to manage their risks and liquidity. The businesses are:

### Equities

As one of the world's largest equities houses and leading equity market participants in the primary and secondary markets, we distribute, structure, execute, finance and clear equity cash and derivative products. The main business lines are:

- *Cash* offers trade execution and clearing for single stocks and portfolios through both traditional and electronic channels, along with investment advisory and consultancy services.
- *Derivatives* enables clients to manage risk and meet funding requirements through a wide range of listed and over-the-counter equity derivative instruments. We create and distribute structured products and notes, enabling our clients to optimize their investment returns.
- *Financing Services* provides our hedge fund and institutional clients with a fully integrated platform for financing transactions, which includes prime brokerage. In addition, we execute and clear exchange-traded equity derivatives in more than 45 markets globally.

### Foreign Exchange, Rates and Credit

Foreign Exchange, Rates and Credit provides execution services and solutions with an emphasis on electronic trading and maintains high levels of balance sheet velocity. The main business lines are:

- *Foreign Exchange* helps our clients manage their currency exposures and is recognized as one of the leading foreign exchange market-makers as well as the market leader in precious metals.
- *Rates and Credit* encompasses sales, trading and market-making in a selected range of rates and credit products. In addition, we work closely with Corporate Client Solutions, providing support to our debt capital markets businesses and tailoring customized financing solutions for our clients.

### UBS IB Research

In UBS IB Research, we offer clients key insights on securities in major financial markets around the globe. Together with UBS Evidence Lab, UBS research analysts refine investor questions into testable propositions and apply various primary research methods, such as quantitative market research, digital footprint analysis, geospatial analysis or data science. In 2017, UBS was named *Institutional Investor* magazine's Top Global Equity Research Firm of the Year. The recognition of this award positions us well under the new Markets in Financial Instruments Directive II (MiFID II) environment, where we continue to focus on our clients' needs with a differentiated approach to question-driven, evidence-based research.

### Organizational structure

Our business is organized along the products and services described above and has a global reach.

We are governed by executive, risk and operating committees and operate through UBS AG branches and other subsidiaries of UBS Group. Securities activities in the US are conducted mainly through UBS Securities LLC, a registered broker-dealer. In the UK, Investment Bank activities are conducted mainly out of UBS AG London Branch and UBS Limited.

### Competitors

Our main competitors are the major global investment banks, including Bank of America Merrill Lynch, Barclays, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, JPMorgan Chase and Morgan Stanley.

# Corporate Center

Corporate Center provides services to the Group through the reporting units Corporate Center – Services and Group Asset and Liability Management (Group ALM). Corporate Center also includes the Non-core and Legacy Portfolio unit.

## Priorities and initiatives

Our Corporate Center functions strive to provide best-in-class services to the Group based on commercially sound service management principles, including transparency on both qualitative and quantitative components of the services offered. Specifically in the areas of finance, risk management and control, and legal, we aim to provide high-quality advice and solutions, while optimizing resources and mitigating risk. In other areas such as compliance, human resources, information technology, operations and marketing and communications, we align services based on demand and delivery of defined strategies. Moreover, we continue to focus on achieving greater effectiveness and efficiency through the strategic levers of workforce and footprint, organization and process optimization and technology.

All Corporate Center functions are represented in onshore, nearshore and offshore locations that allow us to tap into larger talent pools and realize efficiencies by reducing our footprint in high-cost real estate locations. As of 31 December 2017, 36% of Corporate Center employees and contractors were in offshore or nearshore locations compared with 18% as of 31 December 2013.

We seek to increase value by leveraging common capabilities and creating centralized functions. In 2017, we successfully completed the transfer of substantially all shared services functions to our separate Group service companies, which, in addition to meeting regulatory requirements, allows us to further strengthen our approach to service management while remaining efficient in the way we operate. In our technology landscape, we continue to upgrade our infrastructure, simplify our portfolio of applications and deliver digital innovation, such as artificial intelligence.

- Refer to the “Our strategy” section of this report for more information
- Refer to the “Our evolution” section of this report for more information

## Corporate Center – Services

Corporate Center – Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Human Resources, Group Operations, Group Sourcing and Group Technology), Group Finance (excluding Group ALM), Group Legal, Group Risk Control, Group Communications & Branding, Group Regulatory & Governance, and UBS and Society.

The functions within Corporate Center – Services partner with business divisions and other Corporate Center units through a service-based operating model, managing services from a quality, risk and cost perspective in order to achieve operational and financial efficiencies. Corporate Center – Services allocates the majority of its operating expenses to the business divisions and other Corporate Center units. As part of the annual business planning cycle, Corporate Center – Services agrees with the business divisions and other Corporate Center units on projected cost allocations for services provided, depending on expected capital and service consumption levels as well as the nature of the service performed. Since 2017, Corporate Center – Services allocates expenses based on actual costs incurred using service-based billing, providing cost transparency and enabling cost management. In 2015 and 2016, where costs incurred were different from those expected, Corporate Center – Services recognized over- and under-recoveries.

Operating expenses remaining in Corporate Center – Services after allocations relate mainly to Group governance and other corporate activities, certain strategic and regulatory projects and certain retained restructuring expenses.

## Roles and responsibilities within Corporate Center – Services

Head of Group functions	Responsibilities
<b>Group Chief Financial Officer<sup>1</sup></b>	<ul style="list-style-type: none"> <li>– Is responsible for ensuring transparency in, and the assessment of, the financial performance of the Group and business divisions, and for the Group's financial accounting, controlling, forecasting, planning and reporting processes</li> <li>– Is responsible for treasury and capital management, including management and control of funding and liquidity risk with independent oversight from the Group Chief Risk Officer, and for UBS's regulatory capital ratios</li> <li>– Ensures asset and liability management by balancing consumption of the Group's financial resources through consolidation and management of the Group's structural risks, enabling sustainable earnings generation</li> <li>– Manages and controls the Group's tax affairs</li> <li>– Manages the divisional and Group financial control functions</li> <li>– Makes proposals to the Board of Directors (BoD) regarding the accounting standards adopted by the Group, and defines financial reporting and disclosure standards, after consultation with the Audit Committee of the BoD</li> <li>– Provides external certifications under sections 302 and 404 of the Sarbanes-Oxley Act of 2002, together with the Group Chief Executive Officer (CEO)</li> <li>– Coordinates the working relationship with external auditors under the supervision of the Audit Committee of the BoD</li> <li>– Supports the CEO in strategy development and key strategic topics</li> <li>– Provides advice on financial aspects of strategic projects and transactions</li> <li>– Manages relations with investors and analysts, in coordination with the CEO</li> </ul>
<b>Group Chief Operating Officer</b>	<ul style="list-style-type: none"> <li>– Provides quality, cost-effective and differentiating Group-wide IT services and tools in line with the needs of the business divisions and Corporate Center functions</li> <li>– Delivers a wide range of operational services across all business divisions and regions</li> <li>– Efficiently supplies real estate infrastructure and general administrative services, directs and controls all supply and demand management activities, supports the Group with its third-party sourcing strategies and takes responsibility for the Group's nearshore, offshore, outsourcing and supplier-related processes</li> <li>– Formulates and agrees Group-wide operating strategies, objectives, and financial and execution plans for the Group Chief Operating Officer function in support of each business division and the Group functions</li> <li>– Delivers cross-divisional operational initiatives to enhance the Group's operating platform</li> <li>– Defines and executes a human resources strategy aligned with UBS's objectives and positions the Group as an employer of choice</li> <li>– Ensures cost-efficient operational and advisory human resources services to employees as well as strategic advice to managers and executives, supporting them to attract, engage, develop and retain talent</li> </ul>
<b>Group Chief Risk Officer</b>	<ul style="list-style-type: none"> <li>– Manages the divisional, regional and firm-wide risk control functions and monitors and challenges the Group's risk-taking activities</li> <li>– Develops the Group's risk appetite framework and its risk principles</li> <li>– In accordance with the risk appetite framework approved by the BoD, is responsible for: <ul style="list-style-type: none"> <li>(i) implementing appropriate independent control frameworks for the Group's credit, market, treasury, country, compliance and operational risks</li> <li>(ii) developing and implementing the frameworks for risk measurement, aggregation, portfolio controls and for risk reporting</li> <li>(iii) authorizing transactions, positions, exposures, portfolio limits, and credit risk provisions and allowances in accordance with the risk control authorities delegated to this role</li> </ul> </li> <li>– Maintains a control framework to ensure that UBS meets relevant regulatory and professional standards in the conduct of its business</li> </ul>
<b>Group General Counsel</b>	<ul style="list-style-type: none"> <li>– Manages the Group's legal affairs and is responsible for ensuring effective and timely assessment of legal matters impacting the Group or its business and for providing the legal advice required by the Group</li> <li>– Manages and reports all litigation and other significant contentious matters, including all legal proceedings, that involve UBS</li> <li>– Manages and supervises the legal function of the Group</li> </ul>
<b>Group Head Communications &amp; Branding</b>	<ul style="list-style-type: none"> <li>– Manages UBS's corporate and brand communication to its stakeholders in alignment with the Group's overall strategy</li> <li>– Develops UBS's communications strategy, content and positioning with the primary purpose to build and protect the Group's reputation and brand</li> <li>– Manages and coordinates Group-wide marketing communications activities, including partnership marketing and sponsorship measures</li> <li>– Provides shared service delivery of Group-wide communication channels</li> </ul>
<b>Group Head Regulatory &amp; Governance</b>	<ul style="list-style-type: none"> <li>– Develops a coherent and effective governmental policy and regulatory strategy and coordinates key external relationships</li> <li>– Manages the Strategic Regulatory Initiatives portfolio and oversees the planning and execution of relevant initiatives</li> <li>– Establishes global and local recovery and resolution planning and develops key resolvability improvement measures</li> <li>– Designs the Group's legal entity structure and further develops coherent corporate governance standards</li> <li>– Governs the Group's investigation portfolio and performs important investigations</li> </ul>
<b>Head UBS and Society</b>	<ul style="list-style-type: none"> <li>– Is UBS's senior-level representative for sustainability issues</li> <li>– Manages UBS and Society, which covers all of UBS's activities related to sustainable investing, philanthropy, environmental and human rights policies governing client and supplier relationships, its environmental footprint, as well as community investment</li> <li>– Develops the UBS and Society strategy and ensures its execution across divisions and regions through chairmanship of the UBS and Society Operating Committee</li> </ul>

<sup>1</sup> Relates to responsibilities for both Corporate Center – Services and Corporate Center – Group ALM.

### Corporate Center – Group ALM

Group ALM manages the structural risks of our balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with the Group's liquidity and funding portfolios. Group ALM also seeks to optimize the Group's financial performance by matching assets and liabilities within the context of the Group's liquidity, funding and capital targets and constraints. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into the Group's risk governance framework.

Business division-aligned risk management activities performed on behalf of business divisions and other Corporate Center units include managing the interest rate risk in the banking book on behalf of Global Wealth Management and Personal & Corporate Banking, high-quality liquid asset (HQLA) portfolios on behalf of specific business divisions as well as risk management of credit, debit and funding valuation adjustments for our over-the-counter derivatives portfolio. Net income generated by these activities is fully allocated to the associated business divisions and Corporate Center units.

Capital investment and issuance activities consist of managing the Group's equity and capital instruments as well as instruments that contribute to our total loss-absorbing capacity (TLAC). Revenues from investing the Group's equity and the incremental expenses of issuing capital and TLAC instruments at the UBS Group AG level relative to issuing senior debt out of operating subsidiaries are fully allocated to the business divisions and other Corporate Center units based on their attributed portion of the Group's equity.

Group structural risk management activities are performed to meet overall Group-wide risk management objectives. They

include managing the Group's HQLA and long-term debt portfolios. The net positive or negative income generated through these activities is allocated to the business divisions and other Corporate Center units based on their consumption of the underlying risks. This consumption is determined by various liquidity and funding models and, to reduce volatility, is allocated using stable, internal benchmark rates rather than actual income earned by Group ALM. Net positive or negative income not arising as a result of business division consumption is retained by Group ALM.

As part of its risk management activities, Group ALM enters into derivative hedges to manage the economic and the interest rate risk of the different portfolios. The results of certain hedging activities, including any non-economic volatility caused by the applicable accounting treatment, are retained by Group ALM.

### Corporate Center – Non-core and Legacy Portfolio

Non-core and Legacy Portfolio manages legacy positions from businesses exited by the Investment Bank, and is overseen by a committee chaired by the Group Chief Risk Officer.

Non-core and Legacy Portfolio pursues a primarily passive wind-down strategy, focusing on a disciplined reduction of risk-weighted assets, leverage ratio denominator and costs. Positions are managed and exited over time with the objective of maximizing shareholder value. Non-core and Legacy Portfolio also includes positions relating to legal matters arising from businesses that were transferred to it at the time of its formation.

→ **Refer to "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information**

# Risk factors

Certain risks, including those described below, may affect our ability to execute our strategy or our business activities, financial condition, results of operations and prospects. Because a broad-based international financial services firm such as UBS is inherently exposed to multiple risks, many of which become apparent only with the benefit of hindsight, risks of which we are not presently aware or which we currently do not consider to be material could also adversely affect us. The order of presentation of the risk factors below does not indicate the likelihood of their occurrence or the potential magnitude of their consequences.

## **Market conditions and fluctuations may have a detrimental effect on our profitability, capital strength, liquidity and funding position**

*Low and negative interest rates in Switzerland and the eurozone have negatively affected our net interest income:* A continuing low or negative interest rate environment may further erode interest margins and adversely affect the net interest income generated by our Personal & Corporate Banking and Global Wealth Management businesses. Our performance is also affected by the cost of maintaining the high-quality liquid assets (HQLA) required to cover regulatory outflow assumptions embedded in the liquidity coverage ratio (LCR).

The Swiss National Bank permits Swiss banks to make deposits up to a threshold at zero interest. Any reduction in or limitations on the use of this exemption from the otherwise applicable negative interest rates could exacerbate the effect of negative interest rates in Switzerland. Low and negative interest rates may also affect customer behavior and hence our overall balance sheet structure. Mitigating actions that we have taken, or may take in the future, such as the introduction of selective deposit fees or minimum lending rates, have resulted and may further result in the loss of customer deposits, a key source of our funding, net new money outflows and / or a declining market share in our domestic lending business.

Our equity and capital are also affected by changes in interest rates. In particular, the calculation of our Swiss pension plan net defined benefit assets and liabilities is sensitive to the discount rate applied. Any further reduction in interest rates may lower the discount rates and result in pension plan deficits due to the long duration of corresponding liabilities. This would lead to a corresponding reduction in our equity and fully applied common equity tier 1 (CET1) capital.

*We are subject to risk from currency fluctuations:* We prepare our consolidated financial statements in Swiss francs. However, a substantial portion of our assets, liabilities, invested assets, revenues and expenses, equity of foreign operations and risk-weighted assets (RWA) are denominated in US dollars, euros, British pounds and in other foreign currencies. Accordingly, changes in foreign exchange rates may adversely affect our profits, balance sheet, including deferred tax assets, and capital, leverage and liquidity ratios. In particular, the portion of our operating income denominated in non-Swiss franc currencies is greater than the portion of operating expenses denominated in non-Swiss franc currencies. Therefore, the appreciation of the Swiss franc against other currencies generally has an adverse effect on our profits, in the absence of any mitigating actions.

In order to hedge our CET1 capital ratio, CET1 capital needs to have foreign currency exposure, leading to currency sensitivity of CET1 capital. As a consequence, it is not possible to simultaneously fully hedge both the amount of capital and the capital ratio. As the proportion of RWA denominated in non-Swiss franc currencies outweighs the capital in these currencies, a significant appreciation of the Swiss franc against these currencies could benefit our capital ratios, while a significant depreciation of the Swiss franc against these currencies could adversely affect our capital ratios.

→ **Refer to the “Current market climate and industry trends” section of this report for more information**

## **Substantial changes in the regulation of our businesses may adversely affect our business and our ability to execute our strategic plans**

Fundamental changes in the laws and regulations affecting financial institutions can have a material and adverse effect on our business. Following the 2007–2009 financial crisis, regulators and legislators have adopted a wide range of changes to the laws, regulations and supervisory frameworks applicable to banks intended to address the perceived causes of the crisis and to limit the systemic risks posed by major financial institutions. These changes have caused us to make significant changes in our businesses and strategy and to move significant operations into subsidiaries to improve our resolvability or meet regulatory requirements, resulting in substantial implementation costs, increased our capital and funding costs and reduced operational flexibility. Although many of the regulatory changes have been completed, a number of these changes are being phased in over time or require further rulemaking or guidance for implementation. Certain changes are still under consideration. There remains significant uncertainty regarding a number of the measures referred to above.

Notwithstanding attempts by regulators to align their efforts, the measures adopted or proposed differ significantly across the major jurisdictions, making it increasingly difficult to manage a global institution like UBS. Swiss regulatory changes with regard to such matters as capital and liquidity have often proceeded more quickly than those in other major jurisdictions, and the requirements for Swiss major international banks are among the strictest of the major financial centers. This could put Swiss banks such as UBS at a disadvantage when they compete with peer financial institutions subject to more lenient regulation or with unregulated non-bank competitors.

*Higher capital and total loss-absorbing capacity requirements increase our costs:* As an internationally active Swiss systemically relevant bank (SRB), we are subject to capital and total loss-absorbing capacity (TLAC) requirements that are among the most stringent in the world. New Swiss SRB capital requirements impose significantly higher requirements based on RWA and a significantly higher leverage ratio requirement. In addition, we are required to maintain minimum levels of TLAC measured based on both our RWA and the leverage ratio denominator.

We expect increases in our RWA from changes in methodology, add-ons in the calculation of RWA and other changes in 2018 and 2019. Changes to international capital standards for banks recently adopted by the Basel Committee on Banking Supervision are expected to further increase our RWA when the standards are scheduled to become effective in 2022. We also expect that we will incur significant costs to implement the proposed changes.

*Liquidity and funding:* The requirements to maintain an LCR of HQLA to estimated stressed short-term net cash outflows, the proposed requirement to maintain a net stable funding ratio (NSFR), and other similar liquidity and funding requirements we are subject to, oblige us to maintain high levels of overall liquidity, limit our efforts to optimize interest income and expense, make certain lines of business less attractive and reduce our overall ability to generate profits. Both the LCR and NSFR requirements are intended to ensure that we are not overly reliant on short-term funding and that we have sufficient long-term funding for illiquid assets, and the relevant calculations make assumptions about the relative likelihood and amount of outflows of funding and available sources of additional funding in market- and firm-specific stress situations. There can be no assurance that in an actual stress situation our funding outflows would not exceed the assumed amounts. Moreover, many of

our subsidiaries must comply with minimum capital, liquidity and similar requirements and as a result UBS Group AG and UBS AG have contributed a significant portion of their capital and provide substantial liquidity to them. These funds are available to meet funding and collateral needs in the relevant jurisdictions, but are generally not readily available for use by the Group as a whole.

*Banking structure and activity limitations:* We have made significant changes in our legal and operational structure to meet legal and regulatory requirements and expectations. For example, we have transferred all of our US subsidiaries under a US intermediate holding company to meet US regulatory requirements and substantially all the operations of Personal & Corporate Banking and Wealth Management booked in Switzerland to UBS Switzerland AG to improve our resolvability. These changes, particularly the transfer of operations to subsidiaries, such as our US intermediate holding company and UBS Switzerland AG, require significant time and resources to implement and create operational, capital, liquidity, funding and tax inefficiencies. In addition, they may increase our aggregate credit exposure to counterparties as they transact with multiple entities within the UBS Group. Our operations in subsidiaries are subject to local capital, liquidity, stable funding, capital planning and stress testing requirements. These requirements have resulted in increased capital and liquidity requirements in affected subsidiaries, which limit our operational flexibility and negatively affect our ability to benefit from synergies between business units and to distribute earnings to the Group.

In the US, we have incurred substantial costs for implementing our compliance and monitoring framework in connection with the Volcker Rule under the Dodd-Frank Act. We have also been required to modify our business activities both inside and outside the US to conform to the Volcker Rule's activity limitations. The Volcker Rule may also have a substantial impact on market liquidity and the economics of market-making activities. We may incur additional costs in the short term if aspects of the Volcker Rule are repealed or modified. We may become subject to other similar regulations substantively limiting the types of activities in which we may engage or the way we conduct our operations. If adopted as proposed, the rule on single counterparty risk proposed by the US Federal Reserve Board may affect how we conduct our operations in the US, including our use of other financial firms for payments and securities clearing services and as transactional counterparties.



*Resolvability and resolution and recovery planning:* Under the Swiss too big to fail (TBTF) framework, we are required to put in place viable emergency plans to preserve the operation of systemically important functions in the event of a failure. Moreover, under the Swiss TBTF framework and similar regulations in the US, the UK, the EU and other jurisdictions in which we operate, we are required to prepare credible recovery and resolution plans detailing the measures that would be taken to recover in the event of a significant adverse event or to wind down the Group or the operations in a host country through resolution or insolvency proceedings. We have made changes to the legal structure of the Group to improve the viability of our recovery and resolution plans and may be required in the future to make further changes to our legal structure, operations, or liquidity and funding plans to enable our recovery and resolution plans to meet regulatory expectations. If a recovery or resolution plan that we are required to produce in a jurisdiction is determined by the relevant authority to be inadequate or not credible, relevant regulation may permit the authority to place limitations on the scope or size of our business in that jurisdiction, oblige us to hold higher amounts of capital or liquidity, or to change our legal structure or business in order to remove the relevant impediments to resolution.

The Swiss Banking Act and implementing ordinances provide FINMA with significant powers to intervene in order to prevent a failure of, or to resolve, a failing financial institution. FINMA has considerable discretion in determining whether, when, or in what manner to exercise such powers. In case of a threatened insolvency, FINMA may impose more onerous requirements on us, including restrictions on the payment of dividends and interest. FINMA could also require us, directly or indirectly, for example, to alter our legal structure, including by separating lines of business into dedicated entities, with limitations on intra-Group funding and certain guarantees, or to further reduce business risk levels in some manner. FINMA also has the ability to write down or convert into common equity the capital instruments and other liabilities of UBS Group AG, UBS AG and UBS Switzerland AG in connection with a resolution. Refer to *"If we experience financial difficulties, FINMA has the power to open resolution or liquidation proceedings or impose protective measures in relation to UBS Group AG, UBS AG or UBS Switzerland AG, and such proceedings or measures may have a material adverse effect on our shareholders and creditors"* below.

*Substantial changes in market regulation have affected and will continue to affect how we conduct our business:* The revised Markets in Financial Instruments Directive and the associated Regulation (MiFID II / MiFIR) took effect on 3 January 2018. MiFID II, among other things, introduces substantial new regulation of exchanges and trading venues, including new pre-trade and post-trade transparency requirements, a ban on the practice of using commissions on transactions to compensate for research services and substantial new conduct requirements for financial services firms when dealing with clients. Implementation by the G20 countries of the commitment to

require all standardized over-the-counter (OTC) derivative contracts to be traded on exchanges or trading facilities and cleared through central counterparties has had and will continue to have a significant effect on our OTC derivatives business, which is conducted primarily in the Investment Bank. These market changes are likely to reduce the revenue potential of certain lines of business for market participants generally, and we may be adversely affected. For example, we expect that, as a rule, the shift of OTC derivatives trading to a central clearing model will tend to reduce profit margins in these products and the changes introduced by MiFID II may result in a reduction in commission rates and trading margins. Also, these laws may have a material impact on the market infrastructure that we use, available platforms, collateral management and the way we interact with clients, and may cause us to incur material implementation costs. Margin requirements for non-cleared OTC derivatives have required significant changes to collateral agreements with counterparties and our clients' operational processes. In some jurisdictions implementation of these changes is ongoing, while rulemaking and implementation are delayed in others. This may result in market dislocation, disruption of cross-border trading, and concentration of counterparty trading. It also affects our ability to implement the required changes and may limit our ability to transact with clients.

Some of the regulations applicable to UBS AG as a registered swap dealer with the Commodity Futures Trading Commission (CFTC) in the US, and certain regulations that will be applicable when UBS AG registers as a security-based swap dealer with the SEC, apply to UBS AG globally, including those relating to swap data reporting, record-keeping, compliance and supervision. As a result, in some cases US rules will likely duplicate or conflict with legal requirements applicable to us elsewhere, including in Switzerland, and may place us at a competitive disadvantage to firms that are not required to register in the US with the SEC or CFTC.

In many instances, we provide services on a cross-border basis, and we are therefore sensitive to barriers restricting market access for third-country firms. In particular, efforts in the EU to harmonize the regime for third-country firms to access the European market may have the effect of creating new barriers that adversely affect our ability to conduct business in these jurisdictions from Switzerland. In addition, a number of jurisdictions are increasingly regulating cross-border activities based on determinations of equivalence of home country regulation, substituted compliance or similar principles of comity. A negative determination could limit our access to the market in those jurisdictions and may negatively influence our ability to act as a global firm. In addition, as such determinations are typically applied on a jurisdictional level rather than on an entity level, we will generally need to rely on jurisdictions' willingness to collaborate.

→ **Refer to the "Regulation and supervision" and "Regulatory and legal developments" sections of this report for more information**

**If we are unable to maintain our capital strength, this may adversely affect our ability to execute our strategy, our client franchise and our competitive position**

Maintaining our capital strength is a key component of our strategy. It enables us to support the growth of our businesses as well as to meet potential regulatory changes in capital requirements. It reassures our stakeholders, forms the basis for our capital return policy and contributes to our credit ratings. Our capital ratios are determined primarily by RWA, eligible capital and leverage ratio denominator (LRD), all of which may fluctuate based on a number of factors, some of which are outside our control.

Our eligible capital may be reduced by losses recognized within net profit or other comprehensive income. Eligible capital may also be reduced for other reasons, including certain reductions in the ratings of securitization exposures, acquisitions and divestments changing the level of goodwill, adverse currency movements affecting the value of equity, prudential adjustments that may be required due to the valuation uncertainty associated with certain types of positions, and changes in the value of certain pension fund assets and liabilities or in the interest rate and other assumptions used to calculate the changes in our net defined benefit obligation recognized in other comprehensive income.

RWA are driven by our business activities, by changes in the risk profile of our exposures, by changes in our foreign currency exposures and foreign exchange rates and by regulation. For instance, substantial market volatility, a widening of credit spreads, which is a major driver of our value-at-risk, adverse currency movements, increased counterparty risk, deterioration in the economic environment or increased operational risk could result in a rise in RWA. We have significantly reduced our market risk and credit risk RWA in recent years. However, increases in operational risk RWA, particularly those arising from litigation, regulatory and similar matters, and regulatory changes in the calculation of RWA and regulatory add-ons to RWA have offset a substantial portion of this reduction. Changes in the calculation of RWA or, as discussed above, the imposition of additional supplemental RWA charges or multipliers applied to certain exposures and other methodology changes, as well as the implementation of the recently adopted changes to international capital standards for banks, could substantially increase our RWA. In addition, we may not be successful in our plans to further reduce RWA, either because we are unable to carry out fully the actions we have planned or because other business or regulatory developments or actions counteract the effects of our actions.

The leverage ratio is a balance sheet-driven measure and therefore limits balance sheet-intensive activities, such as lending, more than activities that are less balance sheet intensive, and it may constrain our business activities even if we satisfy other risk-based capital requirements. Our LRD is driven by, among other things, the level of client activity, including deposits and loans, foreign exchange rates, interest rates and other market factors. Many of these factors are wholly or partially outside our control.

→ Refer to the "Regulatory and legal developments" section of this report for more information

**We may not be successful in the ongoing execution of our strategic plans**

Over the last six years, we have transformed our business to focus on our wealth management businesses and our universal bank in Switzerland, complemented by Asset Management and a significantly smaller Investment Bank; substantially reduced the RWA and LRD usage in our Corporate Center – Non-core and Legacy Portfolio; and made significant cost reductions. We have recently provided an update on the execution of our strategy and updated our performance targets and provided guidance on capital and resources. Risk remains that we may not succeed in executing our strategy or achieve our performance targets, or may be delayed in doing so. Market events or other factors may adversely affect our ability to achieve our objectives. Macroeconomic conditions, geopolitical uncertainty, changes to regulatory requirements and the continuing costs of meeting these requirements have prompted us to adapt our targets in the past and we may need to do so again in the future.

As part of our strategic plans, we expect to continue to make significant expenditures on technology and infrastructure to improve our client experience, improve and further enable digital offerings and increase efficiency. There is a risk that our investments in new technology will not fully achieve our objectives or improve our ability to attract and retain customers. In addition, we may face competition in providing digitally enabled offerings from both existing competitors and new financial service providers in various portions of the value chain. Our ability to develop and implement competitive digitally enabled offerings and processes will be an important factor in our ability to compete.

Moreover, the continued illiquidity and complexity of many of our legacy risk positions remaining in Corporate Center – Non-core and Legacy Portfolio could make it difficult to sell or otherwise exit these positions and there remains a risk that we could incur significant losses in doing so.

As part of our strategy, we also have programs under way that seek to improve our operating efficiency, in part by controlling our costs. A number of factors could negatively affect our plans. We may not be able to identify feasible cost reduction opportunities that are also consistent with our business goals, and cost reductions may be realized later or may be less than we anticipate. Higher temporary and permanent regulatory costs and higher business demand than we had originally anticipated have partly offset our cost reductions and delayed the achievement of our cost reduction targets in the past, and we could continue to be challenged in the execution of our ongoing plans.

Changes in our workforce as a result of outsourcing, nearshoring or offshoring or staff reductions may introduce new operational risks that, if not effectively addressed, could affect our ability to recognize the desired cost and other benefits from such changes or could result in operational losses. Such changes can also lead to expenses recognized in the income statement well in advance of the cost savings intended to be achieved through such workforce strategy, for example, if provisions for real estate lease contracts need to be recognized or when, in connection with the closure or disposal of non-profitable operations, foreign currency translation losses previously recorded in other comprehensive income are reclassified to the income statement.

As we implement our effectiveness and efficiency programs, we may also experience unintended consequences, such as the loss or degradation of capabilities that we need in order to maintain our competitive position, achieve our targeted returns or meet existing or new regulatory requirements and expectations.

→ Refer to the “Our strategy” section of this report for more information

### **Material legal and regulatory risks arise in the conduct of our business**

As a global financial services firm operating in more than 50 countries, we are subject to many different legal, tax and regulatory regimes, and we are subject to extensive regulatory oversight and exposed to significant liability risk. We are subject to a large number of claims, disputes, legal proceedings and government investigations, and we expect that our ongoing business activities will continue to give rise to such matters in the future. The extent of our financial exposure to these and other matters is material and could substantially exceed the level of provisions that we have established. We are not able to predict the financial and non-financial consequences these matters may have when resolved. Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to

maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate our participation in them. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for us.

Our settlements with governmental authorities in connection with foreign exchange, LIBOR and benchmark interest rates starkly illustrate the significantly increased level of financial and reputational risk now associated with regulatory matters in major jurisdictions. In connection with investigations related to LIBOR and other benchmark rates and to foreign exchange and precious metals, very large fines and disgorgement amounts were assessed against us, and we were required to enter guilty pleas, despite our full cooperation with the authorities in the investigations, and despite our receipt of conditional leniency or conditional immunity from antitrust authorities in a number of jurisdictions, including the US and Switzerland.

Ever since our material losses arising from the 2007–2009 financial crisis, we have been subject to a very high level of regulatory scrutiny and to certain regulatory measures that constrain our strategic flexibility. While we believe that we have remediated the deficiencies that led to those losses as well as to the unauthorized trading incident announced in September 2011, the effects on our reputation and relationships with regulatory authorities of the LIBOR-related settlements of 2012 and settlements with some regulators of matters related to our foreign exchange and precious metals business have resulted in continued scrutiny. We are also subject to significant new regulatory requirements, including recovery and resolution planning, US enhanced prudential standards and Comprehensive Capital Analysis and Review (CCAR). Our implementation of additional regulatory requirements and changes in supervisory standards will likely receive heightened scrutiny from supervisors. If we do not meet supervisory expectations in relation to these or other matters, or have additional supervisory or regulatory issues, we would likely be subject to continued regulatory scrutiny as well as measures that might further constrain our strategic flexibility. We are in active dialog with our regulators concerning the actions that we are taking to improve our operational risk management, control, anti-money laundering, data management and other frameworks and otherwise seek to meet supervisory expectations, but there can be no assurance that our efforts will have the desired effects. As a result of this history, our level of risk with respect to regulatory enforcement may be greater than that of some of our peers.

→ Refer to “Note 20 Provisions and contingent liabilities” in the “Consolidated financial statements” section of this report for more information

### **Operational risks affect our business**

Our businesses depend on our ability to process a large number of transactions, many of which are complex, across multiple and diverse markets in different currencies, to comply with requirements of many different legal and regulatory regimes to which we are subject and to prevent, or promptly detect and stop, unauthorized, fictitious or fraudulent transactions. We also rely on access to, and on the functioning of, systems maintained by third parties, including clearing systems, exchanges, information processors and central counterparties. Any failure of our or third-party systems could have an adverse effect on us. Our operational risk management and control systems and processes are designed to help ensure that the risks associated with our activities, including those arising from process error, failed execution, misconduct, unauthorized trading, fraud, system failures, financial crime, cyberattacks, breaches of information security, inadequate or ineffective access controls and failure of security and physical protection, are appropriately controlled. If our internal controls fail or prove ineffective in identifying and remedying these risks, we could suffer operational failures that might result in material losses, such as the loss from the unauthorized trading incident announced in September 2011.

We and other financial services firms have been subject to breaches of security and to cyber- and other forms of attack, some of which are sophisticated and targeted attacks intended to gain access to confidential information or systems, disrupt service or destroy data, including through the introduction of viruses or malware, social engineering, distributed denial of service attacks and other means. These attempts may occur directly, or using equipment or security passwords of our employees, third party service providers or other users. We may not be able to anticipate, detect or recognize threats to our systems or data or that our preventative measures may not be effective to prevent an attack or a security breach. In the event a security breach occurs notwithstanding our preventative measures, we may not immediately detect a particular breach or attack. Once a particular attack is detected time may be required to investigate and assess the nature and extent of the attack. A successful breach or circumvention of security of our systems or data could have significant negative consequences for us, including disruption of our operations, misappropriation of confidential information concerning us or our customers, damage to our systems, financial losses for us or our customers, violations of data privacy and similar laws, litigation exposure and damage to our reputation.

A major focus of US and other countries' governmental policies relating to financial institutions in recent years has been fighting money laundering and terrorist financing. We are required to maintain effective policies, procedures and controls to detect, prevent and report money laundering and terrorist

financing, and to verify the identity of our clients. We are also subject to laws and regulations related to corrupt and illegal payments to government officials by others, such as the US Foreign Corrupt Practices Act and the UK Bribery Act. We have implemented policies, procedures and internal controls that are designed to comply with such laws and regulations. Failure to maintain and implement adequate programs to combat money laundering, terrorist financing or corruption, or any failure of our programs in these areas, could have serious consequences both from legal enforcement action and from damage to our reputation.

As a result of new and changed regulatory requirements and the changes we have made in our legal structure to meet regulatory requirements and improve our resolvability, the volume, frequency and complexity of our regulatory and other reporting have significantly increased. Regulators have also significantly increased expectations for our internal reporting and data aggregation. We have incurred and continue to incur significant costs to implement infrastructure to meet these requirements. Failure to timely and accurately meet external reporting requirements or to meet regulatory expectations for internal reporting could result in enforcement action or other adverse consequences for us.

Certain types of operational control weaknesses and failures could also adversely affect our ability to prepare and publish accurate and timely financial reports.

In addition, despite the contingency plans we have in place, our ability to conduct business may be adversely affected by a disruption in the infrastructure that supports our businesses and the communities in which we are located. This may include a disruption due to natural disasters, pandemics, civil unrest, war or terrorism and involve electrical, communications, transportation or other services used by us or third parties with whom we conduct business.

### **Our reputation is critical to the success of our business**

Our reputation is critical to the success of our strategic plans, business and prospects. Reputational damage is difficult to reverse, and improvements tend to be slow and difficult to measure. Our reputation has been adversely affected by our losses during the financial crisis, investigations into our cross-border private banking services, criminal resolutions of LIBOR-related and foreign exchange matters, as well as other matters. We believe that reputational damage as a result of these events was an important factor in our loss of clients and client assets across our asset-gathering businesses, and contributed to our loss of and difficulty in attracting staff in the past. Any further reputational damage could have a material adverse effect on our operational results and financial condition and on our ability to achieve our strategic goals and financial targets.

## Performance in the financial services industry is affected by market conditions and the macroeconomic climate

Our businesses are materially affected by market and economic conditions. Adverse changes in interest rates, credit spreads, securities prices, market volatility and liquidity, foreign exchange rates, commodity prices, and other market fluctuations, as well as changes in investor sentiment, can affect our earnings and ultimately our financial and capital positions.

A market downturn and weak macroeconomic conditions can be precipitated by a number of factors, including geopolitical events, changes in monetary or fiscal policy, trade imbalances, natural disasters, pandemics, civil unrest, acts of violence, war or terrorism. Macroeconomic and political developments can have unpredictable and destabilizing effects and, because financial markets are global and highly interconnected, even local and regional events can have widespread impact well beyond the countries in which they occur. Moreover, if individual countries impose restrictions on cross-border payments or other exchange or capital controls, or change their currency (for example, if one or more countries should leave the eurozone), we could suffer losses from enforced default by counterparties, be unable to access our own assets, and / or be impeded in, or prevented from, managing our risks.

We could be materially affected if a crisis develops, regionally or globally, as a result of disruptions in emerging markets or developed markets that are susceptible to macroeconomic and political developments, or as a result of the failure of a major market participant. Over time, our strategic plans have become more heavily dependent on our ability to generate growth and revenue in emerging markets, including China, causing us to be more exposed to the risks associated with such markets. The binding scenario we use in our combined stress test framework reflects these aspects, and assumes a hard landing in China, leading to severe contagion of Asian and emerging markets economies and at the same time multiple debt restructurings in Europe, related direct losses for European banks and fear of a eurozone breakup severely affecting developed markets such as Switzerland, the UK and the US.

→ Refer to “Risk measurement” in the “Risk management and control” section of this report for more information on our stress testing framework

We have material exposures to a number of markets, and the regional balance of our business mix also exposes us to risk. Our Investment Bank’s Equities business, for example, is more heavily weighted to Europe and Asia, and within this business our derivatives business is more heavily weighted to structured products for wealth management clients, in particular with European and Asian underlyings. Turbulence in these markets can therefore affect us more than other financial service providers.

A decrease in business and client activity and market volumes, for example, as a result of significant market volatility, adversely affects transaction fees, commissions and margins, particularly in our wealth management businesses and in the Investment Bank, as we experienced in 2016. A market downturn is likely to reduce the volume and valuations of assets that we manage on behalf of clients, reducing our asset and performance-based fees, and could also cause a decline in the value of assets that we own and account for as investments or trading positions. On the other hand, reduced market liquidity or volatility limits trading opportunities and impedes our ability to manage risks, impacting trading income, and may reduce institutional client activity and therefore transaction and performance-based fees.

Credit risk is an integral part of many of our activities, including lending, underwriting and derivatives activities. Worsening economic conditions and adverse market developments could lead to impairments and defaults on credit exposures and on our trading and investment positions. Losses may be exacerbated by declines in the value of collateral we hold. We are exposed to credit risk in activities such as our prime brokerage, reverse repurchase and Lombard lending, as the value or liquidity of the assets against which we provide financing may decline rapidly. Macroeconomic developments, such as the strength of the Swiss franc and its effect on Swiss exports, the adoption of negative interest rates by the Swiss National Bank or other central banks or any return of crisis conditions within the eurozone or the EU, and the potential implications of the decision in Switzerland to reinstate immigration quotas for EU and European Economic Area citizens, could also adversely affect the Swiss economy, our business in Switzerland in general and, in particular, our Swiss mortgage and corporate loan portfolios.

The aforementioned developments have in the past affected, and could materially affect, the financial performance of business divisions and of UBS as a whole, including through impairment of goodwill and the adjustment of deferred tax asset levels. Refer to “Our financial results may be negatively affected by changes to assumptions and valuations, as well as changes to accounting standards” and “The effect of taxes on our financial results is significantly influenced by tax law changes and reassessments of our deferred tax assets” below.

→ Refer to the “Current market climate and industry trends” section of this report for more information

## UK withdrawal from the EU

In December 2017, the UK and the remaining EU member states reached an agreement on the separation issues under Phase I of the negotiations for the UK’s withdrawal from the EU. As a result, the European Council agreed that “sufficient progress” had been made to allow the negotiations to move to Phase II on transitional arrangements and the future EU-UK relationship. The UK is still expected to leave the EU in March 2019, subject to a possible transition period.

The nature of the UK's future relationship with the EU remains unclear. Any future limitations on providing financial services into the EU from our UK operations could require us to make potentially significant changes to our operations in the UK and the EU, and to our legal structure. In the absence of adequate transition relief being agreed and passed into law by the United Kingdom and the European Union, we currently expect to merge UBS Limited into UBS Europe SE, our German headquartered European bank, prior to the United Kingdom leaving the European Union on 29 March 2019. Clients and other counterparties of UBS Limited would become counterparties of UBS Europe SE through the planned merger of the two entities. However, we anticipate that clients of UBS Limited who can be serviced by UBS AG, London Branch would generally be migrated to UBS AG, London Branch prior to this merger. We further anticipate that some staff would be relocated as a result; the exact number of staff and roles would be determined in due course. The timing and extent of the actions we take may vary considerably depending on regulatory requirements and the nature of any transition or successor agreements with the EU.

**We may not be successful in implementing changes in our wealth management businesses to meet changing market, regulatory and other conditions**

Our wealth and asset management businesses operate in an environment of increasing regulatory scrutiny and changing standards with respect to fiduciary and other standards of care and the focus on mitigating or eliminating conflicts of interest between a manager or advisor and the client, which require effective implementation across the global systems and processes of investment managers and other industry participants. For example, the US Department of Labor has adopted a rule expanding the definition of "fiduciary" under the Employee Retirement Income Security Act (ERISA), which requires us to comply with fiduciary standards under ERISA when dealing with certain retirement plans. We will likely be required to materially change business processes, policies and the terms on which we interact with these clients in order to comply with these rules when they become fully effective. In addition, MiFID II imposes new requirements on us when providing advisory services to clients in the EU, including new requirements for agreements with clients.

We have experienced cross-border outflows over a number of years as a result of heightened focus by fiscal authorities on cross-border investment and fiscal amnesty programs, in anticipation of the implementation in Switzerland of the global automatic exchange of tax information, and as a result of the measures we have implemented in response to these changes. Further changes in local tax laws or regulations and their enforcement, the implementation of cross-border tax information exchange regimes, national tax amnesty or enforcement programs or similar actions may affect our clients' ability or willingness to do business with us and result in additional cross-border outflows.

In recent years, our Wealth Management net new money inflows have come predominantly from clients in Asia Pacific and in the ultra high net worth segment globally. Over time, inflows from these lower-margin segments and markets have been replacing outflows from higher-margin segments and markets, in particular cross-border clients. This dynamic, combined with changes in client product preferences as a result of which low-margin products account for a larger share of our revenues than in the past, has put downward pressure on our Wealth Management's margins.

As the discussion above indicates, we are exposed to possible outflows of client assets in our asset-gathering businesses and to changes affecting the profitability of our wealth management businesses. Initiatives that we may implement to overcome the effects of changes in the business environment on our profitability, balance sheet and capital positions may not succeed in counteracting those effects and may cause net new money outflows and reductions in client deposits, as happened with our balance sheet and capital optimization program in 2015. There is no assurance that we will be successful in our efforts to offset the adverse effect of these or similar trends and developments.

**We may be unable to identify or capture revenue or competitive opportunities, or retain and attract qualified employees**

The financial services industry is characterized by intense competition, continuous innovation, restrictive, detailed, and sometimes fragmented regulation and ongoing consolidation. We face competition at the level of local markets and individual business lines, and from global financial institutions that are comparable to us in their size and breadth. Barriers to entry in individual markets and pricing levels are being eroded by new technology. We expect these trends to continue and competition to increase. Our competitive strength and market position could be eroded if we are unable to identify market trends and developments, do not respond to them by devising and implementing adequate business strategies, adequately developing or updating our technology, particularly in trading businesses, and our digital channels and tools, or are unable to attract or retain the qualified people needed to carry them out.

The amount and structure of our employee compensation is affected not only by our business results but also by competitive factors and regulatory considerations.

In recent years, in response to the demands of various stakeholders, including regulatory authorities and shareholders, and in order to better align the interests of our staff with those of other stakeholders, we have made changes to the terms of compensation awards. Among other things, we have introduced individual caps on the proportion of fixed to variable pay for the GEB members, as well as certain other employees. We have increased average deferral periods for stock awards, expanded forfeiture provisions and, to a more limited extent, introduced clawback provisions for certain awards linked to business performance.

Constraints on the amount or structure of employee compensation, higher levels of deferral, performance conditions and other circumstances triggering the forfeiture of unvested awards may adversely affect our ability to retain and attract key employees. The loss of key staff and the inability to attract qualified replacements, depending on which and how many roles are affected, could seriously compromise our ability to execute our strategy and to successfully improve our operating and control environment and may affect our business performance.

Swiss law requires that shareholders approve the compensation of the Board of Directors (BoD) and the Group Executive Board (GEB) each year. If our shareholders fail to approve the compensation for the GEB or the BoD, this could have an adverse effect on our ability to retain experienced directors and our senior management.

### **We depend on our risk management and control processes to avoid or limit potential losses in our businesses**

Controlled risk-taking is a major part of the business of a financial services firm. Some losses from risk-taking activities are inevitable, but to be successful over time, we must balance the risks we take against the returns we generate. We must, therefore, diligently identify, assess, manage and control our risks, not only in normal market conditions but also as they might develop under more extreme, stressed conditions, when concentrations of exposures can lead to severe losses.

As seen during the financial crisis of 2007–2009, we are not always able to prevent serious losses arising from extreme or sudden market events that are not anticipated by our risk measures and systems. The deterioration of financial markets since the beginning of the crisis was extremely severe by historical standards. Value-at-risk, a statistical measure for market risk, is derived from historical market data, and thus by definition could not have anticipated the losses suffered in the stressed conditions of the crisis. Moreover, stress loss and concentration controls and the dimensions in which we aggregated risk to identify potentially highly correlated exposures proved to be inadequate. As a result, we recorded substantial losses on fixed income trading positions, particularly in 2008 and 2009. Notwithstanding the steps we have taken to strengthen our risk management and control framework, we could suffer further losses in the future if, for example:

- we do not fully identify the risks in our portfolio, in particular risk concentrations and correlated risks;
- our assessment of the risks identified or our response to negative trends proves to be untimely, inadequate, insufficient or incorrect;
- markets move in ways that we do not expect – in terms of their speed, direction, severity or correlation – and our ability to manage risks in the resulting environment is, therefore, affected;

- third parties to whom we have credit exposure or whose securities we hold for our own account are severely affected by events not anticipated by our models, and accordingly we suffer defaults and impairments beyond the level implied by our risk assessment; or
- collateral or other security provided by our counterparties proves inadequate to cover their obligations at the time of their default.

We hold positions related to real estate in various countries, and could suffer losses on these positions. These positions include a substantial Swiss mortgage portfolio. Although management believes that this portfolio is prudently managed, we could nevertheless be exposed to losses if the concerns expressed by the Swiss National Bank and others about unsustainable price escalation in the Swiss real estate market come to fruition. In addition, we continue to hold substantial legacy risk positions, primarily in Corporate Center – Non-core and Legacy Portfolio. They remain illiquid in many cases, and we continue to be exposed to the risk that they may again deteriorate in value.

We also manage risk on behalf of our clients in our asset and wealth management businesses. The performance of assets we hold for our clients in these activities could be adversely affected by the same factors mentioned above. If clients suffer losses or the performance of their assets held with us is not in line with relevant benchmarks against which clients assess investment performance, we may suffer reduced fee income and a decline in assets under management, or withdrawal of mandates.

Investment positions, such as equity investments made as part of strategic initiatives and seed investments made at the inception of funds that we manage, may also be affected by market risk factors. These investments are often not liquid and generally are intended or required to be held beyond a normal trading horizon. They are subject to a distinct control framework. Deteriorations in the fair value of these positions would have a negative effect on our earnings.

### **Liquidity and funding management are critical to our ongoing performance**

The viability of our business depends on the availability of funding sources, and our success depends on our ability to obtain funding at times, in amounts, for tenors and at rates that enable us to efficiently support our asset base in all market conditions. The volume of our funding sources has generally been stable, but could change in the future due to, among other things, general market disruptions or widening credit spreads, which could also influence the cost of funding. A substantial part of our liquidity and funding requirements are met using short-term unsecured funding sources, including retail and wholesale deposits and the regular issuance of money market securities. A change in the availability of short-term funding could occur quickly.

Moreover, more stringent capital and liquidity and funding requirements will likely lead to increased competition for both secured funding and deposits as a stable source of funding, and to higher funding costs. The addition of loss-absorbing debt as a component of capital requirements, the regulatory requirements to maintain minimum TLAC at holding company level and / or at subsidiaries level, as well as the power of resolution authorities to bail in TLAC and other debt obligations, and uncertainty as to how such powers will be exercised, will increase our cost of funding and could potentially increase the total amount of funding required absent other changes in our business.

Reductions in our credit ratings may adversely affect the market value of the securities and other obligations and increase our funding costs, in particular with regard to funding from wholesale unsecured sources, and can affect the availability of certain kinds of funding. In addition, as we experienced in connection with Moody's downgrade of our long-term rating in June 2012, rating downgrades can require us to post additional collateral or make additional cash payments under master trading agreements relating to our derivatives businesses. Our credit ratings, together with our capital strength and reputation, also contribute to maintaining client and counterparty confidence and it is possible that rating changes could influence the performance of some of our businesses.

**Our financial results may be negatively affected by changes to assumptions and valuations, as well as changes to accounting standards**

We prepare our consolidated financial statements in accordance with IFRS. The application of these accounting standards requires the use of judgment based on estimates and assumptions that may involve significant uncertainty at the time they are made. This is the case, for example, with respect to the measurement of fair value of financial instruments, the recognition of deferred tax assets, or the assessment of the impairment of goodwill. Such judgments, including the underlying estimates and assumptions, which encompass historical experience, expectations of the future and other factors, are regularly evaluated to determine their continuing relevance based on current conditions. Using different assumptions could cause the reported results to differ. Changes in assumptions, or failure to make the changes necessary to reflect evolving market conditions, may have a significant effect on the financial statements in the periods when changes occur. Moreover, if the estimates and assumptions in future periods deviate from the current outlook, our financial results may also be negatively affected.

Changes to IFRS or interpretations thereof may cause our future reported results and financial position to differ from current expectations, or historical results to differ from those previously reported due to the adoption of accounting standards on a retrospective basis. Such changes may also affect our regulatory capital and ratios. For example, we adopted IFRS 9 effective on 1 January 2018, which required us to change the accounting treatment of certain instruments, requires us to

record loans at inception net of expected credit losses instead of recording credit losses on an incurred loss basis and is generally expected to result in an increase in recognized credit loss allowances. In addition, the expected credit loss (ECL) provisions of IFRS 9 may result in greater volatility in credit loss expense as ECL changes in response to developments in the credit cycle and composition of our loan portfolio. The effect may be more pronounced in a deteriorating economic environment.

→ **Refer to the "Critical accounting estimates and judgments" section and "Note 1 Summary of significant accounting policies" in the "Consolidated financial statements" section of this report for more information**

**The effect of taxes on our financial results is significantly influenced by tax law changes and reassessments of our deferred tax assets**

Our effective tax rate is highly sensitive to our performance, our expectation of future profitability and statutory tax rates. Based on prior years' tax losses, we have recognized deferred tax assets (DTAs) reflecting the probable recoverable level based on future taxable profit as informed by our business plans. If our performance is expected to produce diminished taxable profit in future years, particularly in the US, we may be required to write down all or a portion of the currently recognized DTAs through the income statement. This would have the effect of increasing our effective tax rate in the year in which any write-downs are taken. Conversely, if our performance is expected to improve, particularly in the US or the UK, we could potentially recognize additional DTAs as a result of that assessment. The effect of doing so would be to significantly reduce our effective tax rate in years in which additional DTAs are recognized and to increase our effective tax rate in future years. Our effective tax rate is also sensitive to any future reductions in statutory tax rates, particularly in the US and Switzerland, which would cause the expected future tax benefit from items such as tax loss carry-forwards in the affected locations to diminish in value. This in turn would cause a write-down of the associated DTAs. For example, the reduction in the US federal corporate tax rate to 21% from 35% introduced by the US Tax Cuts and Jobs Act (TCJA) resulted in a CHF 2.9 billion net write-down in the Group's DTAs in the fourth quarter of 2017. Changes in tax law may materially affect our effective tax rate and in some cases may substantially affect the profitability of certain activities. For example, the TCJA introduced a new minimum tax regime referred to as the base erosion and anti-abuse tax (BEAT) that potentially subjects otherwise deductible payments made from our US businesses to non-US affiliated parties to a minimum tax. We currently expect that BEAT could increase our current tax expense by up to CHF 60 million in 2018. The actual effects could be materially higher as the amount of payments subject to BEAT will increase with higher interest rates and business activity and as a result of interpretative uncertainty relating to BEAT. It may also be lower if we are able to successfully mitigate our payments subject to BEAT.



We generally revalue our DTAs in the second half of the financial year based on a reassessment of future profitability taking into account updated business plan forecasts. We consider the performance of our businesses and the accuracy of historical forecasts tax rates and other factors in evaluating the recoverability of our DTAs, including the remaining tax loss carry-forward period and our assessment of expected future taxable profits in the forecast period used for recognizing DTAs. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict. Our results in recent periods have demonstrated that changes in the recognition of DTAs can have a very significant effect on our reported results. The enactment of the TCJA, and the narrowing of the window between the end of the forecast period and the expiry of our US net operating losses, may also lead us to review our approach to periodically remeasuring our US DTAs and the timing for recognizing deferred tax in our income statement. Any change in the manner in which we remeasure DTAs could impact the effective tax rate, particularly in the year in which the change is made.

Our full-year effective tax rate could also change if aggregate tax expenses in respect of profits from branches and subsidiaries without loss coverage differ from what is expected, or in case of changes to the forecast period used for DTA recognition purposes as part of the aforementioned reassessment of future profitability. Moreover, tax laws or the tax authorities in countries where we have undertaken legal structure changes may prevent the transfer of tax losses incurred in one legal entity to newly organized or reorganized subsidiaries or affiliates or may impose limitations on the utilization of tax losses that relate to businesses formerly conducted by the transferor. Were this to occur in situations where there were also limited planning opportunities to utilize the tax losses in the originating entity, the DTAs associated with such tax losses could be written down through the income statement.

In addition, statutory and regulatory changes, as well as changes to the way in which courts and tax authorities interpret tax laws, could cause the amount of taxes ultimately paid by us to materially differ from the amount accrued.

**Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly**

We plan to operate with a fully applied CET1 capital ratio of around 13% and a fully applied CET1 leverage ratio of around 3.7%. Our ability to maintain these ratios is subject to numerous risks, including the financial results of our businesses, the effect of changes to capital standards, methodologies and interpretation that may adversely affect the calculation of our fully applied CET1 capital ratio, the imposition of risk add-ons or capital buffers, and the application of additional capital, liquidity and similar requirements to subsidiaries. These risks could prevent or delay our ability to achieve our capital returns policy of a progressive cash dividend coupled with a share repurchase program.

**As UBS Group AG is a holding company, its operating results, financial condition and ability to pay dividends and other distributions and / or to pay its obligations in the future depend on funding, dividends and other distributions received directly or indirectly from its subsidiaries, which may be subject to restrictions**

UBS Group AG's ability to pay dividends and other distributions and to pay its obligations in the future will depend on the level of funding, dividends and other distributions, if any, received from UBS AG and other subsidiaries. The ability of such subsidiaries to make loans or distributions, directly or indirectly, to UBS Group AG may be restricted as a result of several factors, including restrictions in financing agreements and the requirements of applicable law and regulatory, fiscal or other restrictions. In particular, UBS Group AG's direct and indirect subsidiaries, including UBS AG, UBS Switzerland AG, UBS Limited and UBS Americas Holding LLC, are subject to laws and regulations that restrict dividend payments, authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to UBS Group AG, or could impact their ability to repay any loans made to, or other investments in, such subsidiary by UBS Group AG or another member of the Group. For example, the US CCAR process requires that our US intermediate holding company demonstrate that it can continue to meet minimum capital standards over a nine-quarter hypothetical severely adverse economic scenario. If it fails to meet the quantitative capital requirements, or the Federal Reserve Board's qualitative assessment of the capital planning process is adverse, our US intermediate holding company will be prohibited from paying dividends or making distributions. Restrictions and regulatory actions of this kind could impede access to funds that UBS Group AG may need to meet its obligations or to pay dividends to shareholders. In addition, UBS Group AG's right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to all prior claims of the subsidiary's creditors.

Our capital instruments may contractually prevent UBS Group AG from proposing the distribution of dividends to shareholders, other than in the form of shares, if we do not pay interest on these instruments.

Furthermore, UBS Group AG may guarantee some of the payment obligations of certain of the Group's subsidiaries from time to time. These guarantees may require UBS Group AG to provide substantial funds or assets to subsidiaries or their creditors or counterparties at a time when UBS Group AG is in need of liquidity to fund its own obligations.

The credit ratings of UBS Group AG or its subsidiaries used for funding purposes could be lower than the ratings of the Group's operating subsidiaries, which may adversely affect the market value of the securities and other obligations of UBS Group AG or those subsidiaries on a standalone basis.

**If we experience financial difficulties, FINMA has the power to open restructuring or liquidation proceedings or impose protective measures in relation to UBS Group AG, UBS AG or UBS Switzerland AG, and such proceedings or measures may have a material adverse effect on our shareholders and creditors**

Under the Swiss Banking Act, FINMA is able to exercise broad statutory powers with respect to Swiss banks and Swiss parent companies of financial groups, such as UBS AG, UBS Group AG and UBS Switzerland AG, if there is justified concern that the entity is overindebted, has serious liquidity problems or, after the expiration of any relevant deadline, no longer fulfills capital adequacy requirements. Such powers include ordering protective measures, instituting restructuring proceedings (and exercising any Swiss resolution powers in connection therewith), and instituting liquidation proceedings, all of which may have a material adverse effect on our shareholders and creditors or may prevent UBS Group AG, UBS AG or UBS Switzerland AG from paying dividends or making payments on debt obligations.

Protective measures may include, but are not limited to, certain measures that could require or result in a moratorium on, or the deferment of, payments. We would have limited ability to challenge any such protective measures, and creditors would have no right under Swiss law or in Swiss courts to reject them, seek their suspension, or challenge their imposition, including measures that require or result in the deferment of payments.

If restructuring proceedings are opened with respect to UBS Group AG, UBS AG or UBS Switzerland AG, the resolution powers that FINMA may exercise include the power to (i) transfer all or some of the assets, debt and other liabilities, and contracts of the entity subject to proceedings to another entity, (ii) stay for a maximum of two business days the termination of, or the exercise of rights to terminate, netting rights, rights to enforce or dispose of certain types of collateral or rights to transfer claims, liabilities or certain collateral, under contracts to which the entity subject to proceedings is a party, and / or (iii) partially or fully write down the equity capital and, if such equity capital is fully written down, convert into equity or write down the capital and other debt instruments of the entity subject to proceedings. Shareholders and creditors would have no right to reject, or to seek the suspension of, any restructuring plan pursuant to which such resolution powers are exercised. They would have only limited rights to challenge any decision to

exercise resolution powers or to have that decision reviewed by a judicial or administrative process or otherwise.

Upon full or partial write-down of the equity and of the debt of the entity subject to restructuring proceedings, the relevant shareholders and creditors would receive no payment in respect of the equity and debt that is written down, the write-down would be permanent, and the investors would not, at such time or at any time thereafter, receive any shares or other participation rights, or be entitled to any write-up or any other compensation in the event of a potential recovery of the debtor. If FINMA orders the conversion of debt of the entity subject to restructuring proceedings into equity, the securities received by the investors may be worth significantly less than the original debt and may have a significantly different risk profile, and such conversion would also dilute the ownership of existing shareholders. In addition, creditors receiving equity would be effectively subordinated to all creditors in the event of a subsequent winding up, liquidation or dissolution of the entity subject to restructuring proceedings, which would increase the risk that investors would lose all or some of their investment.

FINMA has broad powers and significant discretion in the exercise of its powers in connection with restructuring proceedings. Furthermore, certain categories of debt obligations, such as certain types of deposits, are subject to preferential treatment. As a result, holders of obligations of an entity subject to a Swiss restructuring proceeding may have their obligations written down or converted into equity even though obligations ranking on par with or junior to such obligations are not written down or converted.

Moreover, FINMA has expressed its preference for a “single-point-of-entry” resolution strategy for global systemically important financial groups, led by the bank’s home supervisory and resolution authorities and focused on the top-level group company. This would mean that, if UBS AG or one of UBS Group AG’s other subsidiaries faces substantial losses, FINMA could open restructuring proceedings with respect to UBS Group AG only and order a bail-in of its liabilities if there is a justified concern that in the near future such losses could impact UBS Group AG. In that case, it is possible that the obligations of UBS AG or any other subsidiary of UBS Group AG would remain unaffected and outstanding, while the equity capital and the capital and other debt instruments of UBS Group AG would be written down and / or converted into equity of UBS Group AG in order to recapitalize UBS AG or such other subsidiary.

# Financial and operating performance

Management report

# Critical accounting estimates and judgments

In preparing our financial statements in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), we apply judgment and make estimates and assumptions that may involve significant uncertainty at the time they are made. We regularly reassess those estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and we update them as necessary. Changes in estimates and assumptions may have a significant impact on the financial statements. Furthermore, actual results may differ significantly from our estimates, which could result in significant losses to the Group, beyond what we anticipated or provided for.

Key areas involving a high degree of judgment and areas where estimates and assumptions are significant to the consolidated and individual financial statements include:

- Fair value of financial instruments
- Allowances and provisions for credit losses
- Pension and other post-employment benefit plans
- Income taxes
- Goodwill
- Provisions and contingent liabilities
- Consolidation of structured entities

We believe that the judgments, estimates and assumptions we have made are appropriate under the circumstances and that our financial statements fairly present, in all material respects, the financial position of UBS as of 31 December 2017 and the results of our operations and cash flows for the year ended on 31 December 2017 in accordance with IFRS.

- **Refer to “Note 1a Significant accounting policies” in the “Consolidated financial statements” section of this report for more information**
- **Refer to the “Risk factors” section of this report for more information**

# Group performance

## Income statement

CHF million	For the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
Net interest income	6,528	6,413	6,732	2
Credit loss (expense) / recovery	(128)	(37)	(117)	246
Net interest income after credit loss expense	6,400	6,376	6,615	0
Net fee and commission income	17,186	16,397	17,140	5
Net trading income	4,972	4,948	5,742	0
<i>of which: own credit on financial liabilities designated at fair value</i>			553	
Other income	509	599	1,107	(15)
Total operating income	29,067	28,320	30,605	3
<i>of which: net interest and trading income</i>	11,499	11,361	12,474	1
Personnel expenses	15,889	15,720	15,981	1
General and administrative expenses	6,808	7,434	8,107	(8)
Depreciation and impairment of property, equipment and software	1,033	985	920	5
Amortization and impairment of intangible assets	70	91	107	(23)
Total operating expenses	23,800	24,230	25,116	(2)
Operating profit / (loss) before tax	5,268	4,090	5,489	29
Tax expense / (benefit)	4,139	805	(898)	414
Net profit / (loss)	1,128	3,286	6,386	(66)
Net profit / (loss) attributable to non-controlling interests	76	82	183	(7)
<b>Net profit / (loss) attributable to shareholders</b>	<b>1,053</b>	<b>3,204</b>	<b>6,203</b>	<b>(67)</b>

## Comprehensive income

Total comprehensive income	218	2,170	5,781	(90)
Total comprehensive income attributable to non-controlling interests	428	352	83	22
<b>Total comprehensive income attributable to shareholders</b>	<b>(210)</b>	<b>1,817</b>	<b>5,698</b>	

**Performance by business division and Corporate Center unit – reported and adjusted<sup>1,2</sup>**

	For the year ended 31.12.17								
CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services <sup>3</sup>	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
Operating income as reported	7,625	8,349	3,850	2,044	7,651	(153)	(276)	(22)	29,067
<i>of which: gains on sale of subsidiaries and businesses</i>				153					153
<i>of which: gains on sale of financial assets available for sale<sup>4</sup></i>					136				136
<i>of which: net foreign currency translation losses<sup>5</sup></i>							(22)		(22)
Operating income (adjusted)	7,625	8,349	3,850	1,891	7,515	(153)	(254)	(22)	28,800
Operating expenses as reported	5,330	7,141	2,272	1,466	6,402	762	47	381	23,800
<i>of which: personnel-related restructuring expenses<sup>6</sup></i>	38	1	7	16	38	433	1	0	534
<i>of which: non-personnel-related restructuring expenses<sup>6</sup></i>	73	0	0	22	18	522	0	0	634
<i>of which: restructuring expenses allocated from CC – Services<sup>6</sup></i>	353	113	96	62	303	(935)	3	6	0
<i>of which: expenses from modification of terms for certain DCCP awards<sup>7</sup></i>					25				25
Operating expenses (adjusted)	4,867	7,028	2,169	1,366	6,018	743	43	375	22,607
<i>of which: net expenses for provisions for litigation, regulatory and similar matters<sup>8</sup></i>	26	144	2	(3)	(41)	242	0	51	420
Operating profit / (loss) before tax as reported	2,295	1,208	1,578	578	1,249	(914)	(322)	(403)	5,268
Operating profit / (loss) before tax (adjusted)	2,758	1,321	1,681	525	1,497	(895)	(296)	(397)	6,194

	For the year ended 31.12.16								
CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services <sup>3</sup>	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
Operating income as reported	7,291	7,782	3,984	1,931	7,688	(102)	(219)	(36)	28,320
<i>of which: gains on sale of financial assets available for sale<sup>4</sup></i>	21	10	102		78				211
<i>of which: gains on sales of real estate</i>						120			120
<i>of which: gains related to investments in associates</i>			21						21
<i>of which: net foreign currency translation losses<sup>5</sup></i>							(122)		(122)
<i>of which: losses on sales of subsidiaries and businesses</i>	(23)								(23)
Operating income (adjusted)	7,293	7,772	3,861	1,931	7,610	(222)	(97)	(36)	28,113
Operating expenses as reported	5,343	6,675	2,224	1,479	6,684	747	(1)	1,078	24,230
<i>of which: personnel-related restructuring expenses<sup>6</sup></i>	53	7	4	15	154	518	0	1	751
<i>of which: non-personnel-related restructuring expenses<sup>6</sup></i>	55	0	0	15	14	623	0	0	706
<i>of which: restructuring expenses allocated from CC – Services<sup>6</sup></i>	339	132	113	70	410	(1,084)	0	21	0
Operating expenses (adjusted)	4,896	6,536	2,107	1,379	6,107	690	(1)	1,057	22,772
<i>of which: net expenses for provisions for litigation, regulatory and similar matters<sup>8</sup></i>	69	96	3	(2)	42	2	0	584	795
Operating profit / (loss) before tax as reported	1,948	1,107	1,760	452	1,004	(849)	(218)	(1,114)	4,090
Operating profit / (loss) before tax (adjusted)	2,397	1,236	1,754	552	1,503	(912)	(96)	(1,093)	5,341

**Performance by business division and Corporate Center unit – reported and adjusted (continued)<sup>1,2</sup>**

	For the year ended 31.12.15								
CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services <sup>3</sup>	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
Operating income as reported	8,155	7,381	3,877	2,057	8,821	241	277	(203)	30,605
<i>of which: own credit on financial liabilities designated at fair value</i>							553		553
<i>of which: gains on sales of real estate</i>						378			378
<i>of which: gains on sales of subsidiaries and businesses</i>	169			56					225
<i>of which: net foreign currency translation gains<sup>5</sup></i>							88		88
<i>of which: gains related to investments in associates</i>	15		66						81
<i>of which: gains on sale of financial assets available for sale<sup>4</sup></i>					11				11
<i>of which: net losses related to the buyback of debt</i>							(257)		(257)
Operating income (adjusted)	7,971	7,381	3,811	2,001	8,810	(137)	(107)	(203)	29,526
Operating expenses as reported	5,465	6,663	2,231	1,474	6,929	1,059	(5)	1,301	25,116
<i>of which: personnel-related restructuring expenses<sup>6</sup></i>	20	0	2	4	14	406	0	14	460
<i>of which: non-personnel-related restructuring expenses<sup>6</sup></i>	38	0	0	11	7	719	0	0	775
<i>of which: restructuring expenses allocated from CC – Services<sup>6</sup></i>	265	137	99	68	376	(986)	0	43	0
<i>of which: a gain related to a change to retiree benefit plans in the US</i>		(21)							(21)
<i>of which: impairment of an intangible asset</i>					11				11
Operating expenses (adjusted)	5,142	6,547	2,130	1,392	6,522	919	(5)	1,245	23,891
<i>of which: net expenses for provisions for litigation, regulatory and similar matters<sup>8</sup></i>	104	351	(2)	(3)	2	15	0	620	1,087
<b>Operating profit / (loss) before tax as reported</b>	<b>2,689</b>	<b>718</b>	<b>1,646</b>	<b>584</b>	<b>1,892</b>	<b>(818)</b>	<b>282</b>	<b>(1,503)</b>	<b>5,489</b>
<b>Operating profit / (loss) before tax (adjusted)</b>	<b>2,828</b>	<b>834</b>	<b>1,681</b>	<b>610</b>	<b>2,288</b>	<b>(1,056)</b>	<b>(102)</b>	<b>(1,447)</b>	<b>5,635</b>

<sup>1</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>2</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>3</sup> Corporate Center – Services operating expenses presented in this table are after service allocations to business divisions and other Corporate Center units. <sup>4</sup> Includes a gain on the sale of our investment in London Clearing House in the Investment Bank in 2017, gains on sales of our investment in IHS Markit in 2017, 2016 and 2015 in the Investment Bank and a gain on the sale of our investment in Visa Europe in 2016 in Wealth Management and Personal & Corporate Banking. <sup>5</sup> Related to the disposal of foreign subsidiaries and branches. <sup>6</sup> Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information. <sup>7</sup> Relates to the removal of the service period requirement for DCCP awards granted for the performance years 2012 and 2013. <sup>8</sup> Includes recoveries from third parties of CHF 53 million, CHF 13 million and CHF 10 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively.

## 2017 compared with 2016

### Results

We recorded net profit attributable to shareholders of CHF 1,053 million in 2017, which included a net tax expense of CHF 4,139 million, mainly driven by a CHF 2,865 million net write-down of deferred tax assets (DTAs) following a reduction in the US federal corporate tax rate after the enactment of the Tax Cuts and Jobs Act (TCJA) in the US during the fourth quarter of 2017. In 2016, net profit attributable to shareholders was CHF 3,204 million, which included a net tax expense of CHF 805 million. Excluding the aforementioned net write-down of DTAs, net profit attributable to shareholders would have increased 22%.

Profit before tax increased by CHF 1,178 million or 29% to CHF 5,268 million, reflecting higher operating income and a reduction in operating expenses. Operating income increased by CHF 747 million or 3%, mainly due to CHF 789 million higher net fee and commission income, primarily in our wealth management businesses. Operating expenses decreased by CHF 430 million or 2%, mainly due to CHF 626 million lower general and administrative expenses, mainly reflecting CHF 375 million lower net expenses for provisions for litigation, regulatory and similar matters.

In addition to reporting our results in accordance with International Financial Reporting Standards (IFRS), we report adjusted results that exclude items that management believes are not representative of the underlying performance of our

businesses. Such adjusted results are non-GAAP financial measures as defined by SEC regulations. For the purpose of determining adjusted results for 2017, we excluded gains of CHF 153 million on sale of subsidiaries and businesses related to the disposal of Asset Management's fund administration servicing units in Luxembourg and Switzerland, gains of CHF 136 million on sale of financial assets available for sale, net foreign currency translation losses of CHF 22 million, expenses of CHF 25 million related to the modification of terms for Deferred Contingent Capital Plan (DCCP) awards granted for the performance years 2012 and 2013 and net restructuring expenses of CHF 1,168 million. For 2016, we excluded gains of CHF 211 million on sale of financial assets available for sale, gains of CHF 120 million on sales of real estate, gains of CHF 21 million related to investments in associates, net foreign currency translation losses of CHF 122 million, losses of CHF 23 million on sales of subsidiaries and businesses and net restructuring expenses of CHF 1,458 million.

On this adjusted basis, profit before tax increased by CHF 853 million or 16% to CHF 6,194 million, reflecting CHF 687 million higher adjusted operating income and CHF 165 million lower adjusted operating expenses.

### Operating income

Total operating income was CHF 29,067 million compared with CHF 28,320 million. On an adjusted basis, total operating income increased by CHF 687 million or 2% to CHF 28,800 million, mainly reflecting an increase of CHF 789 million in net fee and commission income.

### Net interest and trading income

CHF million	For the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Net interest and trading income</b>				
Net interest income	6,528	6,413	6,732	2
of which: Wealth Management	2,344	2,331	2,326	1
of which: Wealth Management Americas	1,679	1,467	1,174	14
of which: Personal & Corporate Banking	2,086	2,199	2,270	(5)
of which: Asset Management	(14)	(24)	(17)	(42)
Net trading income	4,972	4,948	5,742	0
of which: Wealth Management	694	667	708	4
of which: Wealth Management Americas	332	372	362	(11)
of which: Personal & Corporate Banking	376	333	343	13
of which: Asset Management	(10)	(5)	12	100
<b>Total net interest and trading income</b>	<b>11,499</b>	<b>11,361</b>	<b>12,474</b>	<b>1</b>
of which: Investment Bank	4,282	4,277	5,186	0
of which: Corporate Client Solutions	1,065	822	1,001	30
of which: Investor Client Services	3,217	3,455	4,185	(7)
of which: Corporate Center	(270)	(256)	110	5
of which: Services	(42)	(89)	(3)	(53)
of which: Group ALM	(157)	(104)	426	51
of which: own credit on financial liabilities designated at fair value			553	
of which: Non-core and Legacy Portfolio	(71)	(62)	(313)	15



### Net interest and trading income

Total combined net interest and trading income increased by CHF 138 million to CHF 11,499 million.

Wealth Management net interest income increased by CHF 13 million to CHF 2,344 million, mainly due to an increase in deposit revenues, mostly reflecting higher short-term US dollar interest rates, and higher lending revenues. This was largely offset by lower allocated treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM), reflecting lower banking book interest income and higher funding costs for long-term debt that contributes to total loss-absorbing capacity (TLAC). Net trading income increased by CHF 27 million to CHF 694 million, mainly due to increased client activity, most notably in Asia Pacific and Switzerland.

In Wealth Management Americas, net interest income increased by CHF 212 million to CHF 1,679 million, primarily due to an increase in net interest margin on higher short-term US dollar interest rates as well as higher lending balances. This was partly offset by a CHF 40 million decrease in net trading income, mainly due to lower client activity.

Personal & Corporate Banking net interest income decreased by CHF 113 million to CHF 2,086 million, mainly due to lower allocated treasury-related income from Corporate Center – Group ALM, reflecting higher funding costs for long-term debt that contributes to TLAC and lower banking book interest income. This was partly offset by higher deposit revenues. Net trading income increased by CHF 43 million to CHF 376 million, mainly due to higher revenues from foreign exchange transactions.

In the Investment Bank, net interest and trading income was broadly stable at CHF 4,282 million, due to a CHF 243 million increase in Corporate Client Solutions, mainly in Equity Capital Markets and Risk Management, which was almost entirely offset by a CHF 238 million decrease in Investor Client Services, reflecting lower revenues in Foreign Exchange, Rates and Credit, partly offset by higher revenues in Equities.

In Corporate Center, net interest and trading income decreased by CHF 14 million to negative CHF 270 million, mainly due to a CHF 53 million decrease in Corporate Center – Group ALM, primarily reflecting negative income related to accounting asymmetries. This was largely offset by an increase of CHF 47 million in Corporate Center – Services, mainly reflecting higher allocated treasury-related income from Corporate Center – Group ALM, primarily resulting from a change made in the first quarter of 2017 to the methodology used to allocate certain Corporate Center – Group ALM revenues.

Refer to “Note 3 Net interest and trading income” in the “Consolidated financial statements” section of this report for more information

### Credit loss expense / recovery

The net credit loss expense was CHF 128 million compared with CHF 37 million, mainly reflecting CHF 79 million higher expenses in the Investment Bank, primarily related to a margin loan to a single client following a significant decrease in the value of the collateral.

→ Refer to the “Risk management and control” section of this report for more information

### Credit loss (expense) / recovery

CHF million	For the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
Wealth Management	(4)	(5)	0	(20)
Wealth Management Americas	(4)	(3)	(4)	33
Personal & Corporate Banking	(19)	(6)	(37)	217
Investment Bank	(90)	(11)	(68)	718
Corporate Center	(11)	(13)	(8)	(15)
<i>of which: Non-core and Legacy Portfolio</i>	<i>(11)</i>	<i>(13)</i>	<i>(8)</i>	<i>(15)</i>
<b>Total</b>	<b>(128)</b>	<b>(37)</b>	<b>(117)</b>	<b>246</b>

### Net fee and commission income

Net fee and commission income increased by CHF 789 million to CHF 17,186 million.

Portfolio management and advisory fees increased by CHF 507 million to CHF 8,542 million, primarily driven by our wealth management businesses, mainly due to higher invested assets.

Underwriting fees increased by CHF 349 million to CHF 1,295 million, largely due to higher equity underwriting revenues, mainly in the Investment Bank.

→ Refer to “**Note 4 Net fee and commission income**” in the “**Consolidated financial statements**” section of this report for more information

### Other income

Other income was CHF 509 million compared with CHF 599 million. Excluding the aforementioned adjusting items, which consist of gains on sales of subsidiaries and businesses, gains on sales of financial assets available for sale and real estate, gains related to investments in associates and net foreign currency translation losses, adjusted other income decreased by CHF 150 million. This decrease was mainly due to lower gains on sale of financial assets available for sale and a decrease in other sundry income.

→ Refer to “**Note 5 Other income**” in the “**Consolidated financial statements**” section of this report for more information

### Operating expenses

Total operating expenses decreased by CHF 430 million or 2% to CHF 23,800 million. Excluding net restructuring expenses of CHF 1,168 million compared with CHF 1,458 million in 2016 and expenses of CHF 25 million in 2017 in the Investment Bank related to the modification of terms in DCCP awards granted for the performance years 2012 and 2013, adjusted total operating expenses decreased by CHF 165 million or 1% to CHF 22,607 million. This decrease was mainly due to CHF 375 million lower net expenses for provisions for litigation, regulatory and similar matters, partly offset by a CHF 289 million increase in financial advisor compensation in Wealth Management Americas.

→ Refer to “**Note 30 Changes in organization and disposals**” in the “**Consolidated financial statements**” section of this report for more information on restructuring expenses

### Personnel expenses

Personnel expenses increased by CHF 169 million to CHF 15,889 million and included net restructuring expenses of CHF 534 million in 2017, mainly related to our transitioning activities to nearshore and offshore locations, compared with CHF 751 million in 2016. In addition, 2017 included expenses of CHF 25 million in the Investment Bank related to the modification of terms in DCCP awards granted for the performance years 2012 and 2013. On an adjusted basis, personnel expenses increased by CHF 361 million to CHF 15,330 million.

Adjusted expenses for salaries decreased by CHF 104 million to CHF 5,691 million, mainly reflecting our nearshoring and offshoring initiatives and cost reduction programs.

Adjusted expenses for total variable compensation increased by CHF 103 million, reflecting an increase of CHF 241 million in expenses for current-year awards, partly offset by CHF 140 million lower expenses for awards related to prior years.

Adjusted other personnel expenses increased by CHF 75 million, largely due to CHF 49 million higher social security expenses.

Financial advisor compensation in Wealth Management Americas increased by CHF 289 million to CHF 3,986 million, mainly due to higher compensable revenues and changes we announced in 2016 to our financial advisor compensation model.

→ Refer to the “**Compensation**” section of this report for more information

→ Refer to “**Note 6 Personnel expenses**,” “**Note 26 Pension and other post-employment benefit plans**” and “**Note 27 Employee benefits: variable compensation**” in the “**Consolidated financial statements**” section of this report for more information

### General and administrative expenses

General and administrative expenses decreased by CHF 626 million to CHF 6,808 million. Excluding net restructuring expenses of CHF 627 million compared with CHF 695 million, adjusted general and administrative expenses decreased by CHF 558 million, primarily reflecting CHF 375 million lower net expenses for provisions for litigation, regulatory and similar matters, a decrease in expenses for marketing and public relations and lower professional fees. In addition, the net expense for the UK bank levy was CHF 17 million in 2017 compared with CHF 123 million, primarily as 2017 included a CHF 82 million credit related to prior years.

## Operating expenses

CHF million	For the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Operating expenses as reported</b>				
Personnel expenses	15,889	15,720	15,981	1
General and administrative expenses	6,808	7,434	8,107	(8)
Depreciation and impairment of property, equipment and software	1,033	985	920	5
Amortization and impairment of intangible assets	70	91	107	(23)
<b>Total operating expenses as reported</b>	<b>23,800</b>	<b>24,230</b>	<b>25,116</b>	<b>(2)</b>
<b>Adjusting items</b>				
Personnel expenses	559	751	439	
<i>of which: restructuring expenses<sup>1</sup></i>	<i>534</i>	<i>751</i>	<i>460</i>	
<i>of which: expenses from modification of terms for certain DCCP awards<sup>2</sup></i>	<i>25</i>			
<i>of which: a gain related to a change to retiree benefit plans in the US</i>			<i>(21)</i>	
General and administrative expenses <sup>3</sup>	627	695	761	
Depreciation and impairment of property, equipment and software <sup>3</sup>	7	11	12	
Amortization and impairment of intangible assets	0	0	13	
<i>of which: restructuring expenses<sup>1</sup></i>	<i>0</i>	<i>0</i>	<i>2</i>	
<i>of which: impairment of an intangible asset</i>			<i>11</i>	
<b>Total adjusting items</b>	<b>1,193</b>	<b>1,458</b>	<b>1,225</b>	
<b>Operating expenses (adjusted)<sup>4</sup></b>				
Personnel expenses	15,330	14,969	15,542	2
<i>of which: salaries</i>	<i>5,691</i>	<i>5,795</i>	<i>5,970</i>	<i>(2)</i>
<i>of which: total variable compensation</i>	<i>3,182</i>	<i>3,079</i>	<i>3,410</i>	<i>3</i>
<i>of which: relating to current year<sup>5</sup></i>	<i>2,490</i>	<i>2,249</i>	<i>2,610</i>	<i>11</i>
<i>of which: relating to prior years<sup>6</sup></i>	<i>692</i>	<i>832</i>	<i>799</i>	<i>(17)</i>
<i>of which: Wealth Management Americas – Financial advisor compensation<sup>7</sup></i>	<i>3,986</i>	<i>3,697</i>	<i>3,552</i>	<i>8</i>
<i>of which: other personnel expenses<sup>8</sup></i>	<i>2,471</i>	<i>2,396</i>	<i>2,613</i>	<i>3</i>
General and administrative expenses	6,181	6,739	7,346	(8)
<i>of which: expenses for provisions for litigation, regulatory and similar matters</i>	<i>420</i>	<i>795</i>	<i>1,087</i>	<i>(47)</i>
<i>of which: other general and administrative expenses</i>	<i>5,761</i>	<i>5,944</i>	<i>6,259</i>	<i>(3)</i>
Depreciation and impairment of property, equipment and software	1,026	974	908	5
Amortization and impairment of intangible assets	70	91	94	(23)
<b>Total operating expenses (adjusted)</b>	<b>22,607</b>	<b>22,772</b>	<b>23,891</b>	<b>(1)</b>

<sup>1</sup> Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information. <sup>2</sup> Relates to the removal of the service period requirement for DCCP awards granted for the performance years 2012 and 2013. <sup>3</sup> Consists of restructuring expenses. <sup>4</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>5</sup> Includes expenses relating to performance awards and other variable compensation for the respective performance year. <sup>6</sup> Consists of amortization of prior years' awards relating to performance awards and other variable compensation. <sup>7</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. <sup>8</sup> Consists of expenses related to contractors, social security, pension and other post-employment benefit plans and other personnel expenses. Refer to "Note 6 Personnel expenses" in the "Consolidated financial statements" section of this report for more information.

At this point in time, we believe that the industry continues to operate in an environment in which expenses associated with litigation, regulatory and similar matters will remain elevated for the foreseeable future and we continue to be exposed to a number of significant claims and regulatory matters. The outcome of many of these matters, the timing of a resolution, and the potential effects of resolutions on our future business, financial results or financial condition are extremely difficult to predict.

→ Refer to "Note 7 General and administrative expenses" and "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information

### Depreciation, impairment and amortization

Depreciation and impairment of property, equipment and software increased by CHF 48 million to CHF 1,033 million, largely driven by higher expenses related to internally generated capitalized software.

Amortization and impairment of intangible assets was CHF 70 million compared with CHF 91 million.

→ Refer to "Note 14 Property, equipment and software" and "Note 15 Goodwill and intangible assets" in the "Consolidated financial statements" section of this report for more information

## Tax

We recognized an income tax expense of CHF 4,139 million for 2017, which included a net Swiss tax expense of CHF 485 million and a net non-Swiss tax expense of CHF 3,654 million.

The Swiss tax expense included a current tax expense of CHF 448 million related to taxable profits earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 37 million, which reflected a net decrease in deferred tax assets (DTAs) previously recognized in relation to tax losses carried forward and temporary differences.

The non-Swiss tax expense included a current tax expense of CHF 427 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 3,227 million, which reflected a net decrease in DTAs previously recognized in relation to tax losses carried forward and temporary differences and mainly related to the write-down of US DTAs resulting from the reduction in the federal corporate tax rate to 21% from 35% after the enactment of the TCJA during the fourth quarter of 2017.

The tax expense of CHF 4,139 million for 2017 was higher than the tax expense of CHF 805 million in 2016, mainly as 2017 included a net write-down of DTAs of CHF 2,865 million resulting from the aforementioned reduction in the US federal corporate tax rate.

The TCJA also introduced a new minimum tax regime, referred to as the base erosion and anti-abuse tax (BEAT), which targets US businesses benefiting from deductible payments made to non-US related parties.

For 2018, we currently forecast a full-year tax rate of approximately 25%, including the effects of BEAT, and excluding the effects from any periodic remeasurement of DTAs and any change in the manner in which we remeasure DTAs.

- Refer to **"Note 8 Income taxes" in the "Consolidated financial statements" section of this report for more information**
- Refer to the **"Regulatory and legal developments" section of this report for more information on the TCJA**
- Refer to the **"Risk factors" section of this report for more information**

## Total comprehensive income attributable to shareholders

In 2017, total comprehensive income attributable to shareholders was negative CHF 210 million, reflecting net profit of CHF 1,053 million, more than offset by negative other comprehensive income (OCI) of CHF 1,263 million.

OCI related to cash flow hedges was negative CHF 621 million, primarily reflecting a decrease in unrealized gains on hedging derivatives that resulted from increases in long-term interest rates. In 2016, OCI related to cash flow hedges was negative CHF 666 million.

Foreign currency translation OCI was negative CHF 530 million, mainly resulting from the weakening of the US dollar against the Swiss franc, partly offset by the strengthening of the euro against the Swiss franc. In 2016, foreign currency translation OCI was positive CHF 292 million.

OCI related to own credit on financial liabilities designated at fair value was negative CHF 313 million compared with negative CHF 115 million and mainly reflected a tightening of credit spreads in 2017.

OCI associated with financial assets available for sale was negative CHF 86 million compared with negative CHF 73 million and primarily reflected the reclassification of net gains from OCI to the income statement upon sale of assets, partly offset by net unrealized gains following decreases in the respective long-term interest rates.

Defined benefit plan OCI was positive CHF 288 million compared with negative CHF 824 million. Total pre-tax OCI related to UK defined benefit plans was positive CHF 296 million, reflecting OCI gains of CHF 213 million from the return on plan assets and an OCI gain of CHF 83 million due to a net decrease in the defined benefit obligation (DBO). The OCI gain of CHF 83 million from the net DBO decrease reflected gains of CHF 80 million due to changes in life expectancy assumptions, a gain of CHF 60 million due to a decline in the rate of pension increase and an OCI experience gain of CHF 49 million, reflecting the effects of differences between the previous actuarial assumptions and what actually occurred, partly offset by a loss of CHF 105 million from a decrease in the applicable discount rate.

Total pre-tax OCI related to the Swiss defined benefit plan was negative CHF 78 million. This reflected an OCI gain of CHF 1,619 million from the return on plan assets, which was more than offset by an OCI loss of CHF 1,394 million representing an increase in the excess of the pension surplus over the estimated future economic benefit and an OCI loss of CHF 303 million due to the DBO remeasurement. The OCI loss of CHF 303 million related to the DBO remeasurement mainly reflected a loss of CHF 170 million from a decrease in the applicable discount rate and an OCI experience loss of CHF 152 million, reflecting the effects of differences between the previous actuarial assumptions and what actually occurred.

- Refer to **"Statement of comprehensive income" in the "Consolidated financial statements" section of this report for more information**
- Refer to **"Note 26 Pension and other post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information on defined benefit plans**

## Sensitivity to interest rate movements

As of 31 December 2017, we estimate that a parallel shift in yield curves by +100 basis points could lead to a combined increase in annual net interest income of approximately CHF 0.7 billion in Wealth Management, Wealth Management Americas and Personal & Corporate Banking. Of this increase, approximately CHF 0.4 billion would result from changes in US dollar interest rates.

The immediate effect on shareholders' equity of such a shift in yield curves would be a decrease of approximately CHF 1.5 billion recognized in OCI, of which approximately CHF 1.3 billion would result from changes in US dollar interest rates. Since the majority of this effect on shareholders' equity is related to cash flow hedge OCI, which is not recognized for the purposes of calculating regulatory capital, the immediate effect on regulatory capital would be an increase of approximately CHF 0.1 billion, primarily related to the estimated effect related to pension fund assets and liabilities.

The aforementioned estimates are based on an immediate increase in interest rates, equal across all currencies and relative to implied forward rates applied to our banking book and financial assets available for sale. These estimates further assume no change to balance sheet size and structure, constant foreign exchange rates and no specific management action.

## Net profit attributable to non-controlling interests

Net profit attributable to non-controlling interests was CHF 76 million in 2017 compared with CHF 82 million in the prior year.

From 2018, we currently expect net profit attributable to non-controlling interests to be less than CHF 10 million per year following the redemption of a EUR 600 million non-Basel III-compliant hybrid tier 1 capital instrument in the fourth quarter of 2017.

## Key figures

### Return on tangible equity

The return on tangible equity (RoTE) was 2.4% compared with 6.9%. On an adjusted basis, the RoTE was 4.0% compared with 9.0% and was below our 2017 target of more than 15%. This was mainly due to a CHF 2,865 million net write-down of DTAs in 2017 following a reduction in the US federal corporate tax rate after the enactment of the TCJA during the fourth quarter of 2017.

### Cost / income ratio

The cost / income ratio was 81.5% compared with 85.4%. On an adjusted basis, the cost / income ratio was 78.1% compared with 80.9% and was above our 2017 target range of 60–70%.

### Common equity tier 1 capital ratio / risk-weighted assets

Our fully applied common equity tier 1 (CET1) capital ratio remained stable at 13.8% as of 31 December 2017, exceeding our 2017 target ratio of 13.0% and reflecting a CHF 2 billion increase in CET1 capital and a CHF 15 billion increase in risk-weighted assets (RWA).

Our fully applied RWA increased by CHF 15 billion to CHF 237 billion as of 31 December 2017, primarily due to a CHF 17 billion increase in methodology, policy changes and model updates.

→ Refer to the "Investment Bank," "Corporate Center" and "Capital management" sections of this report for more information

### Common equity tier 1 leverage ratio / leverage ratio denominator

Our fully applied CET1 leverage ratio increased 0.2 percentage points to 3.7% as of 31 December 2017, reflecting the aforementioned increase in CET1 capital, partly offset by a CHF 16 billion increase in the leverage ratio denominator (LRD).

Our fully applied LRD increased by CHF 16 billion to CHF 886 billion as of 31 December 2017, primarily due to asset size and other increases of CHF 20 billion, partly offset by CHF 3 billion incremental netting and collateral mitigation as well as currency effects of CHF 1 billion.

→ Refer to the "Investment Bank," "Corporate Center" and "Capital management" sections of this report for more information

### Going concern leverage ratio

Our fully applied going concern leverage ratio increased 0.1 percentage points to 4.7% as of 31 December 2017, reflecting a CHF 2 billion increase in going concern capital, partly offset by the aforementioned increase in LRD.

→ Refer to the "Capital management" section of this report for more information

### Net new money and invested assets

Management's discussion and analysis on net new money and invested assets is provided in the "Wealth Management," "Wealth Management Americas" and "Asset Management" sections of this report.

### Disposals in 2018

Hana Financial Group, our partner in South Korea, exercised a 10-year buyout option to acquire Asset Management's 51% stake in UBS Hana Asset Management in the third quarter of 2017. This transaction is pending and still subject to regulatory approval.

### Seasonal characteristics

Our revenues may show seasonal patterns, notably in the Investment Bank and our wealth management businesses, which typically show the highest client activity levels in the first quarter, with lower levels throughout the rest of the year, especially during the summer months and end-of-year holiday season. Other seasonal factors that may affect our businesses include annual tax payments (which are concentrated in the second quarter in the US) and asset withdrawals that tend to occur in the fourth quarter.

### Return on equity

CHF million, except where indicated	As of or for the year ended		
	31.12.17	31.12.16	31.12.15
<b>Net profit</b>			
Net profit attributable to shareholders	1,053	3,204	6,203
Amortization and impairment of intangible assets	70	91	107
Pre-tax adjusting items <sup>1,2</sup>	926	1,251	135
Tax effect on adjusting items <sup>3</sup>	(204)	(275)	(140)
Adjusted net profit attributable to shareholders	1,845	4,271	6,305
of which: deferred tax (expense) / benefit <sup>4</sup>	(3,264)	7	1,613
Adjusted net profit attributable to shareholders excluding deferred tax expense / benefit	5,109	4,264	4,692

### Equity

Equity attributable to shareholders	51,214	53,621	55,313
Less: goodwill and intangible assets	6,398	6,556	6,568
Tangible equity attributable to shareholders	44,816	47,065	48,745
of which: DTAs not eligible as CET1 capital <sup>5</sup>	6,654	10,238	10,066
Tangible equity attributable to shareholders excluding DTAs	38,162	36,827	38,679

### Return on equity

Return on equity (%)	2.0	5.9	11.8
Return on tangible equity (%)	2.4	6.9	13.7
Adjusted return on tangible equity (%) <sup>1</sup>	4.0	9.0	13.7
Adjusted return on tangible equity excluding deferred tax expense / benefit and DTAs (%) <sup>1,6</sup>	13.8	11.3	12.4

<sup>1</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>2</sup> Refer to the "Performance by business division and Corporate Center unit – reported and adjusted" table in this section for more information. <sup>3</sup> Generally reflects an indicative tax rate of 22% on pre-tax adjusting items. 2015 included own credit on financial liabilities designated at fair value as an adjusting item with an indicative tax rate of 2%. <sup>4</sup> Deferred tax expense / benefit in respect to taxable profits and any remeasurements of DTAs, such as the net write-down due to the Tax Cuts and Jobs Act enacted in the fourth quarter of 2017. <sup>5</sup> DTAs that do not qualify as CET1 capital, reflecting DTAs recognized for tax loss carry-forwards of CHF 5,797 million as of 31 December 2017 (31 December 2016: CHF 8,403 million; 31 December 2015: CHF 7,468 million) as well as DTAs on temporary differences, excess over threshold of CHF 857 million as of 31 December 2017 (31 December 2016: CHF 1,835 million; 31 December 2015: CHF 2,598 million), in accordance with fully applied Swiss SRB rules. Refer to the "Capital management" section of this report for more information. <sup>6</sup> Calculated as adjusted net profit / loss attributable to shareholders excluding deferred tax expense / benefit, such as the net write-down due to the Tax Cuts and Jobs Act enacted in the fourth quarter of 2017, divided by average tangible equity attributable to shareholders excluding any DTAs that do not qualify as fully applied CET1 capital.

## Net new money<sup>1</sup>

CHF billion	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Wealth Management</b>	<b>51.1</b>	26.8	12.9
<b>Wealth Management (adjusted)<sup>2</sup></b>	<b>51.1</b>	26.8	22.8
<b>Wealth Management Americas</b>	<b>(6.8)</b>	15.4	21.3
<b>Asset Management</b>	<b>58.7</b>	(15.5)	(5.4)
<i>of which: excluding money market flows</i>	<i>48.1</i>	<i>(22.5)</i>	<i>(0.7)</i>
<i>of which: money market flows</i>	<i>10.6</i>	<i>7.0</i>	<i>(4.7)</i>

<sup>1</sup> Net new money excludes interest and dividend income. <sup>2</sup> Adjusted net new money excludes the negative effect on net new money of CHF 9.9 billion in 2015 from our balance sheet and capital optimization program.

## Invested assets

CHF billion	As of		% change from	
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Wealth Management</b>	<b>1,148</b>	977	947	18
<b>Wealth Management Americas<sup>1</sup></b>	<b>1,195</b>	1,119	1,024	7
<b>Asset Management</b>	<b>776</b>	656	650	18
<i>of which: excluding money market funds</i>	<i>701</i>	<i>591</i>	<i>592</i>	<i>19</i>
<i>of which: money market funds</i>	<i>76</i>	<i>66</i>	<i>58</i>	<i>15</i>

<sup>1</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively.

## 2016 compared with 2015

### Results

We recorded net profit attributable to shareholders of CHF 3,204 million in 2016, which included a net tax expense of CHF 805 million. In 2015, net profit attributable to shareholders was CHF 6,203 million, which included a net tax benefit of CHF 898 million.

Profit before tax was CHF 4,090 million in 2016 compared with CHF 5,489 million in the prior year. Operating income decreased by CHF 2,285 million or 7%, mainly due to CHF 1,113 million lower combined net interest and trading income, primarily in the Investment Bank and Corporate Center – Group ALM, and a decline of CHF 743 million in net fee and commission income, primarily in Wealth Management. Operating expenses decreased by CHF 886 million or 4%, mainly due to CHF 673 million lower general and administrative expenses and a decline of CHF 261 million in personnel expenses.

In addition to reporting our results in accordance with IFRS, we report adjusted results that exclude items that management believes are not representative of the underlying performance of our businesses. Such adjusted results are non-GAAP financial measures as defined by SEC regulations. For the purpose of determining adjusted results for 2016, we excluded gains of CHF 211 million on sale of financial assets available for sale, gains on sales of real estate of CHF 120 million, gains of CHF 21 million related to investments in associates, net foreign currency translation losses of CHF 122 million, losses on sales of subsidiaries and businesses of CHF 23 million and net restructuring expenses of CHF 1,458 million. For 2015, we excluded an own credit gain of CHF 553 million, gains on sales of real estate of CHF 378 million, gains on sales of subsidiaries and businesses of CHF 225 million, net foreign currency translation gains of CHF 88 million, gains of CHF 81 million related to investments in associates, gains of CHF 11 million on sale of financial assets available for sale, net losses related to the buyback of debt in a tender offer of CHF 257 million, net restructuring expenses of CHF 1,235 million, a gain of CHF 21 million related to a change to retiree benefit plans in the US and an impairment of an intangible asset of CHF 11 million.

On this adjusted basis, profit before tax was CHF 5,341 million in 2016 compared with CHF 5,635 million in the prior year, reflecting CHF 1,413 million lower operating income, largely offset by CHF 1,119 million lower operating expenses.

### Operating income

Total operating income was CHF 28,320 million compared with CHF 30,605 million. On an adjusted basis, total operating income decreased by CHF 1,413 million or 5% to CHF 28,113 million, mainly reflecting a decrease of CHF 743 million in net fee and commission income and CHF 560 million lower combined net interest and trading income.

### Net interest and trading income

Total combined net interest and trading income decreased by CHF 1,113 million to CHF 11,361 million. Excluding the own credit gain of CHF 553 million in 2015, adjusted net interest and trading income decreased by CHF 560 million.

In Wealth Management, net interest and trading income decreased by CHF 36 million to CHF 2,998 million, mainly reflecting reduced client activity.

Wealth Management Americas net interest and trading income increased by CHF 302 million to CHF 1,839 million, primarily due to an increase in net interest income, reflecting higher short-term interest rates as well as growth in loan and deposit balances.

In Personal & Corporate Banking, net interest and trading income declined by CHF 81 million to CHF 2,532 million, mainly due to lower treasury-related income from Corporate Center – Group ALM and lower deposit-related income.

In the Investment Bank, net interest and trading income decreased by CHF 909 million to CHF 4,277 million, primarily due to a CHF 513 million decline in Equities, with lower revenues in Derivatives and Financing Services. In addition, net interest and trading income decreased by CHF 217 million in our Foreign Exchange, Rates and Credit businesses, mainly as 2015 benefited from higher volatility and client activity levels following the Swiss National Bank's actions in January 2015.

Corporate Center – Group ALM net interest and trading income, excluding the effect of own credit, improved by CHF 23 million.

In Corporate Center – Non-core and Legacy Portfolio, net interest and trading income improved by CHF 251 million, primarily as the prior year included higher losses related to unwind and novation activities.

### Credit loss expense / recovery

The net credit loss expense was CHF 37 million compared with CHF 117 million. The Investment Bank recorded a net credit loss expense of CHF 11 million compared with CHF 68 million in the prior year, reflecting lower expenses related to the energy sector. Net credit loss expense in Personal & Corporate Banking was CHF 6 million compared with CHF 37 million, mainly due to higher net recoveries on existing impaired positions.



### Net fee and commission income

Net fee and commission income decreased by CHF 743 million to CHF 16,397 million.

Investment fund fees declined by CHF 412 million to CHF 3,155 million, mainly in Wealth Management, primarily due to the effects of cross-border outflows and shifts into retrocession-free products, as well as changes in clients' asset allocation.

Underwriting fees decreased by CHF 300 million to CHF 946 million due to lower equity underwriting revenues, predominantly in the Investment Bank.

Net brokerage fees declined by CHF 276 million to CHF 2,784 million, mainly in Wealth Management and the Investment Bank, largely driven by reduced client activity.

Portfolio management and advisory fees increased by CHF 177 million to CHF 8,035 million, primarily in Wealth Management Americas, mainly due to increased managed account fees, reflecting higher invested asset levels.

### Other income

Other income was CHF 599 million compared with CHF 1,107 million. Excluding certain gains on sales of financial assets available for sale and real estate, gains related to investments in associates, net foreign currency translation gains and losses, and gains and losses on sales of subsidiaries and businesses, adjusted other income decreased by CHF 189 million. This decline was mainly due to lower gains on sale of financial assets available for sale.

### Operating expenses

Total operating expenses decreased by CHF 886 million or 4% to CHF 24,230 million. Net restructuring expenses were CHF 1,458 million compared with CHF 1,235 million, reflecting an increase of CHF 291 million in personnel-related restructuring expenses, mainly related to our transitioning activities to nearshore and offshore locations, partly offset by a decrease of CHF 69 million in non-personnel-related restructuring expenses.

Adjusted total operating expenses decreased by CHF 1,119 million or 5% to CHF 22,772 million. This decrease was mainly due to a decline of CHF 607 million in adjusted general and administrative expenses, of which CHF 292 million related to net expenses for provisions for litigation, regulatory and similar matters, and a decrease of CHF 573 million in adjusted personnel expenses, primarily due to lower expenses for salaries and variable compensation.

### Personnel expenses

Personnel expenses decreased by CHF 261 million to CHF 15,720 million and included net restructuring expenses of CHF 751 million compared with CHF 460 million, largely related to our transitioning activities to nearshore and offshore locations and our cost reduction programs. On an adjusted basis, personnel expenses decreased by CHF 573 million to CHF 14,969 million. Adjusted expenses for salaries decreased by CHF 175 million to CHF 5,795 million, mainly reflecting our cost reduction programs. Adjusted expenses for total variable compensation decreased by CHF 331 million, reflecting a decrease of CHF 361 million in expenses for current-year awards.

Adjusted other personnel expenses decreased by CHF 217 million, largely due to CHF 149 million lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions, and a decline of CHF 76 million in social security expenses.

Financial advisor compensation in Wealth Management Americas increased by CHF 145 million to CHF 3,697 million, mainly due to currency effects and higher expenses for compensation commitments, reflecting the recruitment of financial advisors.

### General and administrative expenses

General and administrative expenses decreased by CHF 673 million to CHF 7,434 million.

Excluding net restructuring expenses of CHF 695 million compared with CHF 761 million, adjusted general and administrative expenses decreased by CHF 607 million, primarily reflecting CHF 292 million lower net expenses for provisions for litigation, regulatory and similar matters, a decrease of CHF 95 million in professional fees and CHF 79 million lower expenses for outsourcing of IT and other services. Also, the net expense for the annual UK bank levy was CHF 123 million compared with CHF 166 million, primarily related to currency effects. This net expense was mainly recorded in the Investment Bank and Corporate Center – Non-core and Legacy Portfolio.

### Tax

We recognized a net income tax expense of CHF 805 million for 2016, which included a net Swiss tax expense of CHF 1,094 million and a net non-Swiss tax benefit of CHF 289 million.

The Swiss tax expense included a current tax expense of CHF 459 million related to taxable profits, mainly earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 635 million, which reflected a decrease in deferred tax assets previously recognized in relation to tax losses carried forward and temporary differences.

The net non-Swiss tax benefit included a current tax expense of CHF 353 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. This was more than offset by a net deferred tax benefit of CHF 642 million, primarily due to an increase in our US deferred tax assets, reflecting updated profit forecasts. We recognized a tax expense in 2016 compared with a tax benefit in 2015, mainly due to an upward revaluation of US deferred tax assets in 2015 in relation to the extension of the forecast period for US taxable profits to seven years from six. In 2016, there was no extension of the forecast period.

### **Total comprehensive income attributable to shareholders**

In 2016, total comprehensive income attributable to shareholders was CHF 1,817 million, reflecting net profit of CHF 3,204 million, partly offset by negative OCI of CHF 1,386 million.

Defined benefit plan OCI was negative CHF 824 million compared with positive CHF 298 million. In 2016, we updated and refined certain actuarial assumptions used in calculating our defined benefit obligations (DBOs). This resulted in net OCI gains of CHF 319 million related to the Swiss defined benefit plan and an OCI gain of CHF 63 million related to the UK pension plan.

Total pre-tax OCI related to UK defined benefit plans was negative CHF 615 million, reflecting an OCI loss of CHF 928 million due to a net increase in the DBO, mainly due to a decrease in the applicable discount rate, partly offset by the aforementioned gain of CHF 63 million from changes in assumptions. The OCI loss related to the net increase in the DBO was partly offset by OCI gains of CHF 312 million from the return on plan assets.

Total pre-tax OCI related to the Swiss defined benefit plan was a loss of CHF 105 million. This reflected an OCI loss of CHF 477 million related to a net DBO increase and a loss of CHF 452 million representing an increase in the excess of the pension surplus over the estimated future economic benefit,

largely offset by an OCI gain of CHF 824 million from the return on plan assets. The OCI loss of CHF 477 million related to the net DBO increase was mainly due to an experience loss of CHF 438 million, reflecting the effects of differences between the previous actuarial assumptions and what actually occurred, and a loss of CHF 433 million from a decline in the applicable discount rate, partly offset by the aforementioned net gain of CHF 319 million from changes in assumptions.

OCI related to cash flow hedges was negative CHF 666 million, which primarily reflected a decrease in unrealized gains on hedging derivatives due to an increase in US dollar long-term interest rates. In 2015, OCI related to cash flow hedges was negative CHF 509 million.

OCI related to own credit on financial liabilities designated at fair value was negative CHF 115 million in 2016, mainly reflecting a downward shift in LIBOR curves.

OCI associated with financial assets available for sale was negative CHF 73 million compared with negative CHF 63 million and primarily reflected the reclassification of net gains from OCI to the income statement upon sale of assets, partly offset by net unrealized gains following decreases in the respective long-term interest rates.

Foreign currency translation OCI was CHF 292 million, mainly resulting from the strengthening of the US dollar against the Swiss franc, partly offset by the significant weakening of the British pound against the Swiss franc. In addition, net losses totaling CHF 126 million were reclassified to the income statement following the disposal of foreign subsidiaries and branches.

### **Net profit attributable to non-controlling interests**

Net profit attributable to non-controlling interests was CHF 82 million in 2016 compared with CHF 183 million in the prior year. This mainly related to dividends of CHF 79 million that were paid to preferred noteholders, for which no accrual was required in a prior period.

# Wealth Management

## Wealth Management<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Results</b>				
Net interest income	2,344	2,331	2,326	1
Recurring net fee income <sup>2</sup>	3,634	3,548	3,820	2
Transaction-based income <sup>3</sup>	1,611	1,397	1,778	15
Other income	39	20	231	95
Income	7,629	7,296	8,155	5
Credit loss (expense) / recovery	(4)	(5)	0	(20)
<b>Total operating income</b>	<b>7,625</b>	<b>7,291</b>	<b>8,155</b>	<b>5</b>
Personnel expenses	2,354	2,349	2,532	0
General and administrative expenses	594	640	637	(7)
Services (to) / from Corporate Center and other business divisions	2,372	2,348	2,289	1
<i>of which: services from CC – Services</i>	<i>2,294</i>	<i>2,256</i>	<i>2,209</i>	<i>2</i>
Depreciation and impairment of property, equipment and software	3	2	5	50
Amortization and impairment of intangible assets	7	4	3	75
<b>Total operating expenses</b>	<b>5,330</b>	<b>5,343</b>	<b>5,465</b>	<b>0</b>
<b>Business division operating profit / (loss) before tax</b>	<b>2,295</b>	<b>1,948</b>	<b>2,689</b>	<b>18</b>
<b>Adjusted results<sup>4</sup></b>				
<b>Total operating income as reported</b>	<b>7,625</b>	<b>7,291</b>	<b>8,155</b>	<b>5</b>
<i>of which: gain / (loss) on sales of subsidiaries and businesses</i>		<i>(23)</i>	<i>169</i>	
<i>of which: gain related to investments in associates</i>			<i>15</i>	
<i>of which: gain on sale of financial assets available for sale<sup>5</sup></i>		<i>21</i>		
<b>Total operating income (adjusted)</b>	<b>7,625</b>	<b>7,293</b>	<b>7,971</b>	<b>5</b>
<b>Total operating expenses as reported</b>	<b>5,330</b>	<b>5,343</b>	<b>5,465</b>	<b>0</b>
<i>of which: personnel-related restructuring expenses</i>	<i>38</i>	<i>53</i>	<i>20</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>73</i>	<i>55</i>	<i>38</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>353</i>	<i>339</i>	<i>265</i>	
<b>Total operating expenses (adjusted)</b>	<b>4,867</b>	<b>4,896</b>	<b>5,142</b>	<b>(1)</b>
<b>Business division operating profit / (loss) before tax as reported</b>	<b>2,295</b>	<b>1,948</b>	<b>2,689</b>	<b>18</b>
<b>Business division operating profit / (loss) before tax (adjusted)</b>	<b>2,758</b>	<b>2,397</b>	<b>2,828</b>	<b>15</b>
<b>Key performance indicators<sup>6</sup></b>				
Pre-tax profit growth (%)	17.8	(27.6)	15.6	
Cost / income ratio (%)	69.9	73.2	67.0	
Net new money growth (%)	5.2	2.8	1.3	
Gross margin on invested assets (bps)	72	77	86	(6)
Net margin on invested assets (bps)	22	21	28	5
<b>Adjusted key performance indicators<sup>4,6</sup></b>				
Pre-tax profit growth (%)	15.1	(15.2)	12.6	
Cost / income ratio (%)	63.8	67.1	64.5	
Net new money growth (%)	5.2	2.8	2.3	
Gross margin on invested assets (bps)	72	77	84	(6)
Net margin on invested assets (bps)	26	25	30	4

## Wealth Management (continued)<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Additional information</b>				
Recurring income <sup>7</sup>	5,978	5,880	6,146	2
Recurring income as a percentage of income (%)	78.4	80.6	75.4	
Average attributed equity (CHF billion) <sup>8</sup>	6.2	3.5	3.5	77
Return on attributed equity (%) <sup>8</sup>	37.1	56.1	77.4	
Return on attributed tangible equity (%) <sup>8</sup>	47.7			
Risk-weighted assets (CHF billion) <sup>8</sup>	30.2	25.8	25.3	17
of which: held by Wealth Management (CHF billion)	29.0	25.8	25.3	12
of which: held by CC – Group ALM on behalf of Wealth Management (CHF billion) <sup>9</sup>	1.2			
Leverage ratio denominator (CHF billion) <sup>8</sup>	173.9	115.5	119.0	51
of which: held by Wealth Management (CHF billion)	128.0	115.5	119.0	11
of which: held by CC – Group ALM on behalf of Wealth Management (CHF billion) <sup>9</sup>	45.9			
Goodwill and intangible assets (CHF billion)	1.4	1.3	1.3	8
Net new money (CHF billion)	51.1	26.8	12.9	
Invested assets (CHF billion)	1,148	977	947	18
Client assets (CHF billion)	1,338	1,157	1,122	16
Loans, gross (CHF billion)	115.2	101.9	105.2	13
Due to customers (CHF billion)	195.3	192.3	172.3	2
Personnel (full-time equivalents)	9,665	9,721	10,239	(1)
Client advisors (full-time equivalents)	3,794	3,859	4,019	(2)

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. <sup>3</sup> Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. <sup>4</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>5</sup> Reflects a gain on the sale of our investment in Visa Europe in 2016. <sup>6</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>7</sup> Recurring income consists of net interest income and recurring net fee income. <sup>8</sup> Refer to the "Capital management" section of this report for more information. <sup>9</sup> Represents risk-weighted assets and leverage ratio denominator held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information.

## Regional breakdown of key figures<sup>1</sup>

As of or for the year ended 31.12.17	Europe	Asia Pacific	Switzerland	Emerging markets	Total of regions <sup>2</sup>	of which: ultra high net worth	of which: Global Family Office <sup>3</sup>
Net new money (CHF billion)	17.4	28.3	5.7	0.8	52.2	45.2	6.3
Net new money growth (%)	4.9	9.7	3.2	0.5	5.3	8.2	6.7
Invested assets (CHF billion)	402	373	204	166	1,145	678	120
Client advisors (full-time equivalents)	1,265	1,037	743	651	3,696	810 <sup>4</sup>	

<sup>1</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>2</sup> Excluding minor functions with 98 client advisors, CHF 3 billion of invested assets, and CHF 1.1 billion of net new money outflows in 2017. <sup>3</sup> Joint venture between Wealth Management and the Investment Bank. Global Family Office is reported as a sub-segment of ultra high net worth and is included in the ultra high net worth figures. <sup>4</sup> Represents client advisors who exclusively serve ultra high net worth clients. In addition to these, other client advisors may also serve certain ultra high net worth clients, but not exclusively.

## 2017 compared with 2016

### Results

Profit before tax increased by CHF 347 million or 18% to CHF 2,295 million and adjusted profit before tax increased by CHF 361 million or 15% to CHF 2,758 million, mainly reflecting higher operating income.

### Operating income

Total operating income increased by CHF 334 million or 5% to CHF 7,625 million. 2016 included a loss on the sale of subsidiaries and businesses of CHF 23 million and a gain of CHF 21 million on the sale of our investment in Visa Europe. Excluding these items, adjusted operating income increased by CHF 332 million or 5% to CHF 7,625 million, driven by increases across all income lines.

Net interest income increased by CHF 13 million to CHF 2,344 million, primarily due to higher deposit revenues, mostly reflecting higher short-term US dollar interest rates, as well as an increase in lending revenues. This was partly offset by lower allocated treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM), reflecting lower banking book interest income and higher funding costs for long-term debt that contributes to total loss-absorbing capacity.

Recurring net fee income increased by CHF 86 million to CHF 3,634 million, predominantly driven by higher average invested assets, increases in discretionary and advisory mandate penetration and pricing measures. These factors were partly offset by the effects of cross-border outflows and shifts into retrocession-free products.

Transaction-based income increased by CHF 214 million to CHF 1,611 million across all regions and most products, mainly due to increased client activity, most notably in Asia Pacific and Switzerland.

Other income increased by CHF 19 million to CHF 39 million, reflecting net gains on sales of subsidiaries and businesses.

### Operating expenses

Total operating expenses decreased by CHF 13 million to CHF 5,330 million and adjusted operating expenses decreased by CHF 29 million or 1% to CHF 4,867 million.

Personnel expenses increased by CHF 5 million to CHF 2,354 million and increased by CHF 20 million to CHF 2,316 million on an adjusted basis, mainly due to higher variable compensation.

General and administrative expenses decreased by CHF 46 million to CHF 594 million and decreased by CHF 64 million to CHF 521 million on an adjusted basis, predominantly driven by lower net expenses for provisions for litigation, regulatory and similar matters.

Net expenses for services from Corporate Center and other business divisions increased by CHF 24 million to CHF 2,372 million and increased by CHF 10 million to CHF 2,019 million on an adjusted basis, mainly reflecting higher costs related to strategic and regulatory initiatives and higher net expenses from control functions, partly offset by lower net expenses from Group Technology.

### Cost / income ratio

The cost / income ratio decreased to 69.9% from 73.2%. On an adjusted basis, the ratio decreased to 63.8% from 67.1% and was within our 2017 target range of 55% to 65%.

### Net new money

Net new money was CHF 51.1 billion compared with CHF 26.8 billion, resulting in an annual growth rate of 5.2% compared with 2.8%, which was above our 2017 target range of 3% to 5%. Net new money was positive in all regions, predominantly driven by inflows in Asia Pacific and Europe. Cross-border-related net outflows were CHF 12 billion compared with CHF 14 billion, mainly driven by outflows in emerging markets. In addition, we incurred net outflows of CHF 8 billion related to the introduction of fees on euro deposit concentrations in Europe, emerging markets and Switzerland. Net new money from ultra high net worth clients was CHF 45.2 billion compared with CHF 27.3 billion.

### Invested assets

Invested assets increased by CHF 171 billion to CHF 1,148 billion, primarily reflecting positive market performance of CHF 114 billion, net new money of CHF 51 billion, positive foreign currency translation effects of CHF 4 billion and an increase of CHF 4 billion due to the positive net effect of acquisitions and divestments of subsidiaries and businesses. Discretionary and advisory mandate penetration increased to 28.9% from 26.9%.

### Personnel

Wealth Management employed 9,665 personnel compared with 9,721. The number of client advisors decreased by 65 to 3,794 and the number of non-client-facing staff remained stable at 5,871.

## 2016 compared with 2015

### Results

Profit before tax decreased by CHF 741 million or 28% to CHF 1,948 million and adjusted profit before tax decreased by CHF 431 million or 15% to CHF 2,397 million, reflecting lower operating income, partly offset by decreased operating expenses.

### Operating income

Total operating income decreased by CHF 864 million or 11% to CHF 7,291 million. 2016 included a loss on the sale of subsidiaries and businesses of CHF 23 million and a gain of CHF 21 million on the sale of our investment in Visa Europe. 2015 included net gains of CHF 169 million on the sale of subsidiaries and businesses and a CHF 15 million gain related to our investment in the SIX Group. Excluding these items, adjusted operating income decreased by CHF 678 million or 9% to CHF 7,293 million, mainly due to lower transaction-based income and recurring net fee income.

Net interest income increased by CHF 5 million to CHF 2,331 million, mainly due to higher deposit revenues, partly offset by lower treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM).

Recurring net fee income decreased by CHF 272 million to CHF 3,548 million due to the effects of cross-border outflows and shifts into retrocession-free products, changes in clients' asset allocation and the effect of our exit from the Australian and Belgian domestic businesses. This was partly offset by the effects of increases in discretionary and advisory mandate penetration and pricing measures.

Transaction-based income decreased by CHF 381 million to CHF 1,397 million across all regions and most products, mainly due to reduced client activity, most notably in Asia Pacific and emerging markets. Additionally, 2015 included a fee of CHF 45 million received from Personal & Corporate Banking for the shift of clients, as a result of a detailed client segmentation review.

Other income decreased by CHF 211 million to CHF 20 million, mainly related to the aforementioned net gains on the sale of subsidiaries and businesses in 2015.

### Operating expenses

Total operating expenses decreased by CHF 122 million or 2% to CHF 5,343 million and adjusted operating expenses decreased by CHF 246 million or 5% to CHF 4,896 million.

Personnel expenses decreased by CHF 183 million to CHF 2,349 million and adjusted personnel expenses decreased by CHF 216 million to CHF 2,296 million, driven by a decrease in staff levels and lower variable compensation expenses, as well as lower pension costs for our Swiss pension plan, reflecting the effects of changes to demographic and financial assumptions.

General and administrative expenses increased by CHF 3 million to CHF 640 million and adjusted general and administrative expenses decreased by CHF 14 million to CHF 585 million. This was driven by a CHF 35 million decrease in net expenses for provisions for litigation, regulatory and similar matters, partly offset by higher professional fees.

Net expenses for services from Corporate Center and other business divisions increased by CHF 59 million to CHF 2,348 million and adjusted net expenses for services decreased by CHF 15 million to CHF 2,009 million, mainly reflecting lower expenses from Group Operations partly offset by higher occupancy expenses from Group Corporate Services.

### Cost / income ratio

The cost / income ratio increased to 73.2% from 67.0%. On an adjusted basis, the ratio increased to 67.1% from 64.5% and was above our target range of 55% to 65%.

### Net new money

Net new money was CHF 26.8 billion compared with adjusted net new money of CHF 22.8 billion in the prior year, which excluded the negative effect of CHF 9.9 billion from our balance sheet and capital optimization program. The net new money growth rate was 2.8% compared with an adjusted growth rate of 2.3%, and was below our target range of 3% to 5%. Net new money was driven predominantly by inflows in Asia Pacific, but also Europe and Switzerland, partly offset by outflows in emerging markets, mainly due to cross-border outflows. Total cross-border outflows were CHF 14 billion compared with CHF 8 billion, mainly driven by outflows in emerging markets. On a global basis, net new money from ultra high net worth clients was CHF 27.3 billion compared with adjusted net new money of CHF 23.4 billion.

### Invested assets

Invested assets increased by CHF 30 billion to CHF 977 billion, primarily reflecting net new money of CHF 27 billion and positive market performance of CHF 19 billion, partly offset by a CHF 13 billion decrease due to the sale of subsidiaries and businesses that did not affect net new money, and negative foreign currency translation effects of CHF 1 billion. Discretionary and advisory mandate penetration increased to 26.9% from 26.4%.

### Personnel

Wealth Management employed 9,721 personnel compared with 10,239. The number of client advisors decreased by 160 to 3,859 and the number of non-client-facing staff decreased by 358 to 5,862, both driven by our cost reduction programs and our exit from the Australian domestic business. Of the aforementioned decrease in client advisors, 82 were related to our exit from the Australian domestic business.

# Wealth Management Americas

## Wealth Management Americas – in US dollars<sup>1</sup>

USD million, except where indicated	As of or for the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Results</b>				
Net interest income	1,712	1,484	1,215	15
Recurring net fee income <sup>2</sup>	5,263	4,880	4,795	8
Transaction-based income <sup>3</sup>	1,516	1,474	1,614	3
Other income	24	35	32	(31)
Income	8,516	7,873	7,657	8
Credit loss (expense) / recovery	(4)	(3)	(4)	33
<b>Total operating income</b>	<b>8,512</b>	<b>7,871</b>	<b>7,653</b>	<b>8</b>
Personnel expenses	5,274	4,874	4,746	8
Financial advisor compensation <sup>4</sup>	3,310	2,931	2,921	13
Compensation commitments with recruited financial advisors <sup>5</sup>	754	808	761	(7)
Salaries and other personnel costs	1,210	1,135	1,064	7
General and administrative expenses	657	576	845	14
Services (to) / from Corporate Center and other business divisions	1,307	1,250	1,252	5
<i>of which: services from CC – Services</i>	<i>1,286</i>	<i>1,236</i>	<i>1,236</i>	<i>4</i>
Depreciation and impairment of property, equipment and software	2	2	3	0
Amortization and impairment of intangible assets	42	50	53	(16)
<b>Total operating expenses</b>	<b>7,282</b>	<b>6,752</b>	<b>6,899</b>	<b>8</b>
<b>Business division operating profit / (loss) before tax</b>	<b>1,230</b>	<b>1,118</b>	<b>754</b>	<b>10</b>
<b>Adjusted results<sup>6</sup></b>				
<b>Total operating income as reported</b>	<b>8,512</b>	<b>7,871</b>	<b>7,653</b>	<b>8</b>
<i>of which: gain on sale of financial assets available for sale</i>		<i>10</i>		
<b>Total operating income (adjusted)</b>	<b>8,512</b>	<b>7,861</b>	<b>7,653</b>	<b>8</b>
<b>Total operating expenses as reported</b>	<b>7,282</b>	<b>6,752</b>	<b>6,899</b>	<b>8</b>
<i>of which: personnel-related restructuring expenses</i>	<i>1</i>	<i>7</i>	<i>0</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>0</i>	<i>0</i>	<i>0</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>115</i>	<i>134</i>	<i>141</i>	
<i>of which: a gain related to a change to retiree benefit plans in the US</i>			<i>(21)</i>	
<b>Total operating expenses (adjusted)</b>	<b>7,167</b>	<b>6,610</b>	<b>6,779</b>	<b>8</b>
<b>Business division operating profit / (loss) before tax as reported</b>	<b>1,230</b>	<b>1,118</b>	<b>754</b>	<b>10</b>
<b>Business division operating profit / (loss) before tax (adjusted)</b>	<b>1,345</b>	<b>1,250</b>	<b>874</b>	<b>8</b>
<b>Key performance indicators<sup>7</sup></b>				
Pre-tax profit growth (%)	10.0	48.3	(23.1)	
Cost / income ratio (%)	85.5	85.8	90.1	
Net new money growth (%)	(0.7)	1.5	2.1	
Gross margin on invested assets (bps)	73	74	75	(1)
Net margin on invested assets (bps)	11	10	7	10
<b>Adjusted key performance indicators<sup>6,7</sup></b>				
Pre-tax profit growth (%)	7.6	43.0	(15.1)	
Cost / income ratio (%)	84.2	84.1	88.5	
Net new money growth (%)	(0.7)	1.5	2.1	
Gross margin on invested assets (bps)	73	74	75	(1)
Net margin on invested assets (bps)	12	12	9	0

**Wealth Management Americas – in US dollars (continued)<sup>1</sup>**

<i>USD million, except where indicated</i>	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Additional information</b>				
Recurring income <sup>8</sup>	6,975	6,364	6,010	10
Recurring income as a percentage of income (%)	81.9	80.8	78.5	
Average attributed equity (USD billion) <sup>9</sup>	6.7	2.6	2.6	158
Return on attributed equity (%) <sup>9</sup>	18.3	43.0	29.3	
Return on attributed tangible equity (%) <sup>9</sup>	41.6			
Risk-weighted assets (USD billion) <sup>9</sup>	27.2	23.4	21.9	16
<i>of which: held by Wealth Management Americas (USD billion)</i>	26.2	23.4	21.9	12
<i>of which: held by CC – Group ALM on behalf of Wealth Management Americas (USD billion)<sup>10</sup></i>	1.0			
Leverage ratio denominator (USD billion) <sup>9</sup>	90.2	66.9	62.8	35
<i>of which: held by Wealth Management Americas (USD billion)</i>	73.7	66.9	62.8	10
<i>of which: held by CC – Group ALM on behalf of Wealth Management Americas (USD billion)<sup>10</sup></i>	16.6			
Goodwill and intangible assets (USD billion)	3.6	3.7	3.7	(3)
Net new money (USD billion)	(7.2)	15.4	21.4	
Net new money including interest and dividend income (USD billion) <sup>11</sup>	21.7	40.8	47.8	
Invested assets (USD billion) <sup>12</sup>	1,225	1,100	1,022	11
Client assets (USD billion)	1,288	1,160	1,084	11
Loans, gross (USD billion)	54.4	51.6	48.7	5
Due to customers (USD billion)	77.6	89.2	83.1	(13)
Recruitment loans to financial advisors	2,619	3,033	3,179	(14)
Other loans to financial advisors	580	462	418	26
Personnel (full-time equivalents)	13,512	13,526	13,611	0
Financial advisors (full-time equivalents)	6,822	7,025	7,140	(3)

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. <sup>3</sup> Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. <sup>4</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. <sup>5</sup> Compensation commitments with recruited financial advisors represent expenses related to compensation commitments granted to financial advisors at the time of recruitment that are subject to vesting requirements. <sup>6</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>7</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>8</sup> Recurring income consists of net interest income and recurring net fee income. <sup>9</sup> Refer to the "Capital management" section of this report for more information. <sup>10</sup> Represents risk-weighted assets and leverage ratio denominator held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information. <sup>11</sup> Presented in line with historical reporting practice in the US market. <sup>12</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by USD 11 billion. The effect on net new money in all periods was immaterial.



## 2017 compared with 2016

### Results

Profit before tax increased by USD 112 million or 10% to USD 1,230 million, and adjusted profit before tax increased by USD 95 million or 8% to USD 1,345 million driven by higher operating income, partly offset by higher operating expenses.

### Operating income

Total operating income increased by USD 641 million or 8% and adjusted operating income increased by USD 651 million or 8% to USD 8,512 million, mainly due to higher net interest income and recurring net fee income.

Net interest income increased by USD 228 million to USD 1,712 million, primarily due to an increase in net interest margin on higher short-term US dollar interest rates as well as higher lending balances. The average mortgage portfolio balance increased 18% and the average securities-backed lending portfolio balance increased 2%.

Recurring net fee income increased by USD 383 million to USD 5,263 million, mainly due to increased invested assets in managed accounts.

Transaction-based income increased by USD 42 million to USD 1,516 million, primarily due to higher client activity.

### Operating expenses

Total operating expenses increased by USD 530 million or 8% to USD 7,282 million and adjusted operating expenses increased by USD 557 million or 8% to USD 7,167 million.

Personnel expenses increased by USD 400 million to USD 5,274 million and adjusted personnel expenses increased by USD 406 million to USD 5,273 million, mainly due to USD 379 million higher financial advisor compensation and an increase in salaries and other personnel costs. The higher financial advisor compensation reflects higher compensable revenues as well as changes we announced in 2016 to our financial advisor compensation model. The increase in salaries and other personnel costs is due to an increase in support staff. These increases were partly offset by lower expenses for compensation commitments with recruited financial advisors.

General and administrative expenses increased by USD 81 million to USD 657 million, largely due to a USD 51 million net expense for provisions for litigation, regulatory and similar matters. Furthermore, other provisions increased by USD 22 million, mainly as 2016 included a release of USD 18 million.

Net expenses for services from Corporate Center and other business divisions increased by USD 57 million to USD 1,307 million and increased by USD 76 million to USD 1,192 million on an adjusted basis, mainly reflecting higher costs related to Group Technology and strategic and regulatory initiatives.

### Cost / income ratio

The cost / income ratio decreased to 85.5% from 85.8%. On an adjusted basis, the cost / income ratio was 84.2% compared with 84.1% and was within our 2017 target range of 75% to 85%.

### Net new money

Net new money outflows were USD 7.2 billion compared with net inflows of USD 15.4 billion, reflecting outflows from net recruiting partly offset by inflows from financial advisors employed with UBS for more than one year. The net new money growth rate was negative 0.7% compared with positive 1.5%, and was below our 2017 target range of 2% to 4%.

### Invested assets

Invested assets increased by USD 125 billion to USD 1,225 billion, reflecting positive market performance of USD 135 billion, partly offset by net new money outflows of USD 7 billion. Discretionary and advisory mandate penetration increased to 36.8% from 35.1%.

### Personnel

As of 31 December 2017, Wealth Management Americas employed 13,512 personnel, a decrease of 14 from 31 December 2016. Financial advisor headcount decreased by 203 to 6,822, due to attrition. Non-financial advisor headcount increased by 189 to 6,690 due to an increase in support staff.

## 2016 compared with 2015

### Results

Profit before tax increased by USD 364 million or 48% to USD 1,118 million, and adjusted profit before tax increased by USD 376 million or 43% to USD 1,250 million due to higher operating income and lower operating expenses.

### Operating income

Total operating income increased by USD 218 million or 3% to USD 7,871 million. Adjusted operating income increased by USD 208 million or 3% to USD 7,861 million, due to higher net interest income and recurring net fee income, partly offset by lower transaction-based income.

Net interest income increased by USD 269 million to USD 1,484 million, due to higher short-term interest rates and growth in loan and deposit balances. The average mortgage portfolio balance increased 12% and the average securities-backed lending portfolio balance increased 6%.

Recurring net fee income increased by USD 85 million to USD 4,880 million, mainly due to increased managed account fees, reflecting higher invested asset levels.

Transaction-based income decreased by USD 140 million to USD 1,474 million, primarily due to lower client activity levels.

### Operating expenses

Operating expenses decreased by USD 147 million or 2% to USD 6,752 million and adjusted operating expenses decreased by USD 169 million or 2% to USD 6,610 million, due to USD 260 million lower net expenses for provisions for litigation, regulatory and similar matters, partly offset by higher adjusted personnel expenses.

Personnel expenses increased by USD 128 million to USD 4,874 million and adjusted personnel expenses increased by USD 101

million to USD 4,867 million, mainly due to higher salary costs and other personnel costs due to an increase in support staff, as well as higher expenses for compensation commitments, reflecting the recruitment of financial advisors.

General and administrative expenses decreased by USD 269 million to USD 576 million, mainly due to the aforementioned reduction in net expenses for provisions for litigation, regulatory and similar matters.

### Cost / income ratio

The cost / income ratio was 85.8% compared with 90.1%. On an adjusted basis, the cost / income ratio was 84.1% compared with 88.5% and was within our target range of 75% to 85%.

### Net new money

Net new money was USD 15.4 billion compared with USD 21.4 billion, reflecting lower inflows from financial advisors employed with UBS for more than one year. The net new money growth rate was 1.5% compared with 2.1%, and was below our target range of 2% to 4%.

### Invested assets

Invested assets increased by USD 78 billion to USD 1,100 billion, reflecting positive market performance of USD 62 billion and net new money inflows of USD 15 billion. Discretionary and advisory mandate penetration increased to 35.1% from 34.3%.

### Personnel

As of 31 December 2016, Wealth Management Americas employed 13,526 personnel, a decrease of 85 from 31 December 2015. Financial advisor headcount decreased by 115 to 7,025, due to attrition. Non-financial advisor headcount increased by 30 to 6,501.

Wealth Management Americas – in Swiss francs<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Results</b>				
Net interest income	1,679	1,467	1,174	14
Recurring net fee income <sup>2</sup>	5,162	4,825	4,623	7
Transaction-based income <sup>3</sup>	1,488	1,458	1,555	2
Other income	24	35	31	(31)
Income	8,353	7,785	7,384	7
Credit loss (expense) / recovery	(4)	(3)	(4)	33
<b>Total operating income</b>	<b>8,349</b>	<b>7,782</b>	<b>7,381</b>	<b>7</b>
Personnel expenses	5,173	4,819	4,579	7
Financial advisor compensation <sup>4</sup>	3,246	2,898	2,817	12
Compensation commitments with recruited financial advisors <sup>5</sup>	740	799	735	(7)
Salaries and other personnel costs	1,187	1,122	1,027	6
General and administrative expenses	644	570	822	13
Services (to) / from Corporate Center and other business divisions	1,282	1,235	1,209	4
of which: services from CC – Services	1,262	1,221	1,193	3
Depreciation and impairment of property, equipment and software	2	2	3	0
Amortization and impairment of intangible assets	41	50	51	(18)
<b>Total operating expenses</b>	<b>7,141</b>	<b>6,675</b>	<b>6,663</b>	<b>7</b>
<b>Business division operating profit / (loss) before tax</b>	<b>1,208</b>	<b>1,107</b>	<b>718</b>	<b>9</b>
<b>Adjusted results<sup>6</sup></b>				
<b>Total operating income as reported</b>	<b>8,349</b>	<b>7,782</b>	<b>7,381</b>	<b>7</b>
of which: gain on sale of financial assets available for sale		10		
<b>Total operating income (adjusted)</b>	<b>8,349</b>	<b>7,772</b>	<b>7,381</b>	<b>7</b>
<b>Total operating expenses as reported</b>	<b>7,141</b>	<b>6,675</b>	<b>6,663</b>	<b>7</b>
of which: personnel-related restructuring expenses	1	7	0	
of which: non-personnel-related restructuring expenses	0	0	0	
of which: restructuring expenses allocated from CC – Services	113	132	137	
of which: a gain related to a change to retiree benefit plans in the US			(21)	
<b>Total operating expenses (adjusted)</b>	<b>7,028</b>	<b>6,536</b>	<b>6,547</b>	<b>8</b>
<b>Business division operating profit / (loss) before tax as reported</b>	<b>1,208</b>	<b>1,107</b>	<b>718</b>	<b>9</b>
<b>Business division operating profit / (loss) before tax (adjusted)</b>	<b>1,321</b>	<b>1,236</b>	<b>834</b>	<b>7</b>
<b>Key performance indicators<sup>7</sup></b>				
Pre-tax profit growth (%)	9.1	54.2	(20.2)	
Cost / income ratio (%)	85.5	85.7	90.2	
Net new money growth (%)	(0.6)	1.5	2.1	
Gross margin on invested assets (bps)	73	75	75	(3)
Net margin on invested assets (bps)	11	11	7	0
<b>Adjusted key performance indicators<sup>6,7</sup></b>				
Pre-tax profit growth (%)	6.9	48.2	(11.8)	
Cost / income ratio (%)	84.1	84.1	88.7	
Net new money growth (%)	(0.6)	1.5	2.1	
Gross margin on invested assets (bps)	73	74	75	(1)
Net margin on invested assets (bps)	12	12	8	0

**Wealth Management Americas – in Swiss francs (continued)<sup>1</sup>**

<i>CHF million, except where indicated</i>	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Additional information</b>				
Recurring income <sup>8</sup>	6,841	6,292	5,798	9
Recurring income as a percentage of income (%)	81.9	80.8	78.5	
Average attributed equity (CHF billion) <sup>9</sup>	6.6	2.6	2.5	154
Return on attributed equity (%) <sup>9</sup>	18.3	43.4	29.0	
Return on attributed tangible equity (%) <sup>9</sup>	41.6			
Risk-weighted assets (CHF billion) <sup>9</sup>	26.5	23.8	21.9	11
<i>of which: held by Wealth Management Americas (CHF billion)</i>	25.5	23.8	21.9	7
<i>of which: held by CC – Group ALM on behalf of Wealth Management Americas (CHF billion)<sup>10</sup></i>	1.0			
Leverage ratio denominator (CHF billion) <sup>9</sup>	88.0	68.1	62.9	29
<i>of which: held by Wealth Management Americas (CHF billion)</i>	71.8	68.1	62.9	5
<i>of which: held by CC – Group ALM on behalf of Wealth Management Americas (CHF billion)<sup>10</sup></i>	16.2			
Goodwill and intangible assets (CHF billion)	3.5	3.7	3.7	(5)
Net new money (CHF billion)	(6.8)	15.4	21.3	
Net new money including interest and dividend income (CHF billion) <sup>11</sup>	21.4	40.5	46.9	
Invested assets (CHF billion) <sup>12</sup>	1,195	1,119	1,024	7
Client assets (CHF billion)	1,256	1,181	1,085	6
Loans, gross (CHF billion)	53.0	52.5	48.8	1
Due to customers (CHF billion)	75.6	90.8	83.2	(17)
Recruitment loans to financial advisors	2,553	3,087	3,184	(17)
Other loans to financial advisors	565	471	418	20
Personnel (full-time equivalents)	13,512	13,526	13,611	0
Financial advisors (full-time equivalents)	6,822	7,025	7,140	(3)

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. <sup>3</sup> Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. <sup>4</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. <sup>5</sup> Compensation commitments with recruited financial advisors represent expenses related to compensation commitments granted to financial advisors at the time of recruitment that are subject to vesting requirements. <sup>6</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>7</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>8</sup> Recurring income consists of net interest income and recurring net fee income. <sup>9</sup> Refer to the "Capital management" section of this report for more information. <sup>10</sup> Represents risk-weighted assets and leverage ratio denominator held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information. <sup>11</sup> Presented in line with historical reporting practice in the US market. <sup>12</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively. The effect on net new money in all periods was immaterial.

# Personal & Corporate Banking

## Personal & Corporate Banking<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Results</b>				
Net interest income	2,086	2,199	2,270	(5)
Recurring net fee income <sup>2</sup>	593	553	544	7
Transaction-based income <sup>3</sup>	1,104	1,028	959	7
Other income	86	211	140	(59)
Income	3,869	3,990	3,913	(3)
Credit loss (expense) / recovery	(19)	(6)	(37)	217
<b>Total operating income</b>	<b>3,850</b>	<b>3,984</b>	<b>3,877</b>	<b>(3)</b>
Personnel expenses	836	845	873	(1)
General and administrative expenses	290	285	264	2
Services (to) / from Corporate Center and other business divisions	1,133	1,080	1,077	5
<i>of which: services from CC – Services</i>	<i>1,227</i>	<i>1,186</i>	<i>1,180</i>	<i>3</i>
Depreciation and impairment of property, equipment and software	13	15	17	(13)
Amortization and impairment of intangible assets	0	0	0	
<b>Total operating expenses</b>	<b>2,272</b>	<b>2,224</b>	<b>2,231</b>	<b>2</b>
<b>Business division operating profit / (loss) before tax</b>	<b>1,578</b>	<b>1,760</b>	<b>1,646</b>	<b>(10)</b>
<b>Adjusted results<sup>4</sup></b>				
<b>Total operating income as reported</b>	<b>3,850</b>	<b>3,984</b>	<b>3,877</b>	<b>(3)</b>
<i>of which: gain related to investments in associates</i>		<i>21</i>	<i>66</i>	
<i>of which: gain on sale of financial assets available for sale<sup>5</sup></i>		<i>102</i>		
<b>Total operating income (adjusted)</b>	<b>3,850</b>	<b>3,861</b>	<b>3,811</b>	<b>0</b>
<b>Total operating expenses as reported</b>	<b>2,272</b>	<b>2,224</b>	<b>2,231</b>	<b>2</b>
<i>of which: personnel-related restructuring expenses</i>	<i>7</i>	<i>4</i>	<i>2</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>0</i>	<i>0</i>	<i>0</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>96</i>	<i>113</i>	<i>99</i>	
<b>Total operating expenses (adjusted)</b>	<b>2,169</b>	<b>2,107</b>	<b>2,130</b>	<b>3</b>
<b>Business division operating profit / (loss) before tax as reported</b>	<b>1,578</b>	<b>1,760</b>	<b>1,646</b>	<b>(10)</b>
<b>Business division operating profit / (loss) before tax (adjusted)</b>	<b>1,681</b>	<b>1,754</b>	<b>1,681</b>	<b>(4)</b>
<b>Key performance indicators<sup>6</sup></b>				
Pre-tax profit growth (%)	(10.3)	6.9	9.3	
Cost / income ratio (%)	58.7	55.7	57.0	
Net interest margin (bps)	157	163	167	(4)
Net new business volume growth for personal banking (%)	4.0	3.1	2.4	
<b>Adjusted key performance indicators<sup>4,6</sup></b>				
Pre-tax profit growth (%)	(4.2)	4.3	7.1	
Cost / income ratio (%)	56.1	54.5	55.4	
Net interest margin (bps)	157	163	167	(4)
Net new business volume growth for personal banking (%)	4.0	3.1	2.4	

**Personal & Corporate Banking (continued)<sup>1</sup>**

<i>CHF million, except where indicated</i>	As of or for the year ended			% change from
	<b>31.12.17</b>	31.12.16	31.12.15	31.12.16
<b>Additional information</b>				
Average attributed equity (CHF billion) <sup>7</sup>	<b>6.1</b>	4.1	3.9	49
Return on attributed equity (%) <sup>7</sup>	<b>25.8</b>	43.2	41.9	
Return on attributed tangible equity (%) <sup>7</sup>	<b>25.8</b>			
Risk-weighted assets (CHF billion) <sup>7</sup>	<b>49.1</b>	41.6	34.6	18
<i>of which: held by Personal &amp; Corporate Banking (CHF billion)</i>	<b>48.0</b>	41.6	34.6	15
<i>of which: held by CC – Group ALM on behalf of Personal &amp; Corporate Banking (CHF billion)<sup>8</sup></i>	<b>1.0</b>			
Leverage ratio denominator (CHF billion) <sup>7</sup>	<b>186.9</b>	152.2	153.8	23
<i>of which: held by Personal &amp; Corporate Banking (CHF billion)</i>	<b>148.0</b>	152.2	153.8	(3)
<i>of which: held by CC – Group ALM on behalf of Personal &amp; Corporate Banking (CHF billion)<sup>8</sup></i>	<b>38.9</b>			
Business volume for personal banking (CHF billion)	<b>155</b>	149	148	4
Net new business volume for personal banking (CHF billion)	<b>6.0</b>	4.6	3.4	
Client assets (CHF billion) <sup>9</sup>	<b>667</b>	630	611	6
Loans, gross (CHF billion)	<b>131.4</b>	133.9	135.6	(2)
Due to customers (CHF billion)	<b>135.9</b>	135.9	132.4	0
Secured loan portfolio as a percentage of total loan portfolio, gross (%)	<b>92.7</b>	92.9	93.9	
Impaired loan portfolio as a percentage of total loan portfolio, gross (%) <sup>10</sup>	<b>0.6</b>	0.6	0.6	
Personnel (full-time equivalents)	<b>5,102</b>	5,143	5,058	(1)

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. <sup>3</sup> Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. <sup>4</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>5</sup> Reflects a gain on the sale of our investment in Visa Europe in 2016. <sup>6</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>7</sup> Refer to the "Capital management" section of this report for more information. <sup>8</sup> Represents risk-weighted assets and leverage ratio denominator held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information. <sup>9</sup> Client assets are comprised of invested assets and other assets held purely for transactional purposes or custody only. We do not measure net new money for Personal & Corporate Banking. <sup>10</sup> Refer to the "Risk management and control" section of this report for more information on impaired loan exposures.

## 2017 compared with 2016

### Results

Profit before tax decreased by CHF 182 million or 10% to CHF 1,578 million. Adjusted profit before tax decreased by CHF 73 million or 4% to CHF 1,681 million, due to slightly lower operating income and higher operating expenses.

#### Operating income

Total operating income decreased by CHF 134 million or 3% to CHF 3,850 million. 2016 included a gain on the sale of our investment in Visa Europe of CHF 102 million, as well as gains related to investments in associates of CHF 21 million. Excluding these items, adjusted operating income decreased by CHF 11 million to CHF 3,850 million, mainly reflecting lower net interest income, partly offset by higher transaction-based income.

Net interest income decreased by CHF 113 million to CHF 2,086 million, mainly due to lower allocated treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM) reflecting higher funding costs for long-term debt that contributes to total loss-absorbing capacity and lower banking book interest income. This was partly offset by higher deposit revenues.

→ Refer to the “Corporate Center – Group Asset and Liability Management” section under “Financial and operating performance” for more information

Recurring net fee income increased by CHF 40 million to CHF 593 million, mainly reflecting higher custody and mandates revenues.

Transaction-based income increased by CHF 76 million to CHF 1,104 million, mainly reflecting higher revenues from foreign exchange and credit card transactions.

Other income decreased by CHF 125 million to CHF 86 million, mainly due to the aforementioned gains on the sale of our investment in Visa Europe and investments in associates.

We recorded a net credit loss expense of CHF 19 million compared with CHF 6 million, reflecting higher expenses for newly impaired positions as well as lower net recoveries on existing impaired positions.

→ Refer to the “Risk management and control” section of this report for more information

#### Operating expenses

Operating expenses increased by CHF 48 million to CHF 2,272 million and adjusted operating expenses increased by CHF 62 million to CHF 2,169 million.

Personnel expenses decreased by CHF 9 million to CHF 836 million and adjusted personnel expenses decreased by CHF 12 million to CHF 829 million, mainly reflecting lower salary costs due to a decrease in the number of employees and other cost saving initiatives.

General and administrative expenses slightly increased by CHF 5 million to CHF 290 million.

Net expenses for services from Corporate Center and other business divisions increased by CHF 53 million to CHF 1,133 million. Adjusted net expenses increased by CHF 70 million to CHF 1,037 million, mainly reflecting higher expenses for services for strategic and regulatory initiatives and from Group Operations.

#### Cost / income ratio

The cost / income ratio increased to 58.7% from 55.7%. On an adjusted basis, the ratio increased to 56.1% compared with 54.5% and remained within our 2017 target range of 50% to 60%.

#### Net interest margin

The net interest margin decreased 6 basis points to 157 basis points on both a reported and adjusted basis, and remained within our 2017 target range of 140 to 180 basis points.

#### Net new business volume growth for personal banking

The net new business volume growth rate for our personal banking business was 4.0% compared with 3.1% and remained within the upper level of our 2017 target range of 1% to 4%. Net new client assets and, to a lesser extent, net new loans were positive.

#### Personnel

Personal & Corporate Banking employed 5,102 personnel as of 31 December 2017, a decrease of 41 compared with 5,143 personnel as of 31 December 2016.

## 2016 compared with 2015

### Results

Profit before tax increased by CHF 114 million or 7% to CHF 1,760 million. Adjusted profit before tax increased by CHF 73 million or 4% to CHF 1,754 million, due to higher operating income and lower operating expenses.

### Operating income

Total operating income increased by CHF 107 million or 3% to CHF 3,984 million. 2016 included a gain on the sale of our investment in Visa Europe of CHF 102 million, as well as gains related to investments in associates of CHF 21 million, compared with CHF 66 million. Excluding these items, adjusted operating income increased by CHF 50 million to CHF 3,861 million, mainly reflecting higher transaction-based income and a lower net credit loss expense, partly offset by decreased net interest income.

Net interest income decreased by CHF 71 million to CHF 2,199 million, mainly due to lower treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM) and lower deposit-related income driven by the adverse effect of persistently low interest rates on our replication portfolios. This was partly offset by higher loan-related income.

Recurring net fee income increased by CHF 9 million to CHF 553 million, mainly reflecting higher account-keeping fees partly offset by lower fee income allocated from Group ALM for the provision of collateral in relation to issued covered bonds.

Transaction-based income increased by CHF 69 million to CHF 1,028 million, mainly as 2015 included a fee of CHF 45 million paid to Wealth Management for the shift of clients as a result of a detailed client segmentation review. Additionally, 2016 included higher fees from corporate finance activity.

Other income increased by CHF 71 million to CHF 211 million, mainly due to the aforementioned gains on the sale of our investment in Visa Europe and investments in associates.

We recorded a net credit loss expense of CHF 6 million compared with CHF 37 million, mainly due to higher net recoveries on existing impaired positions.

### Operating expenses

Operating expenses decreased by CHF 7 million to CHF 2,224 million and adjusted operating expenses decreased by CHF 23 million to CHF 2,107 million.

Personnel expenses decreased by CHF 28 million to CHF 845 million, mainly due to lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions, as well as lower variable compensation expenses. This was partly offset by higher expenses due to a shift of staff from Wealth Management to Personal & Corporate Banking.

General and administrative expenses increased by CHF 21 million to CHF 285 million, mainly reflecting higher capital-related levies in Switzerland.

Net expenses for services from Corporate Center and other business divisions increased by CHF 3 million to CHF 1,080 million. Adjusted net expenses decreased by CHF 11 million to CHF 967 million, mainly reflecting lower allocations from Group Operations and Group Technology.

### Cost / income ratio

The cost / income ratio decreased to 55.7% from 57.0%. On an adjusted basis, the ratio decreased to 54.5% compared with 55.4% and remained within our target range of 50% to 60%.

### Net interest margin

The net interest margin decreased 4 basis points to 163 basis points on both a reported and adjusted basis, and remained within our target range of 140 to 180 basis points.

### Net new business volume growth for personal banking

The net new business volume growth rate for our personal banking business was 3.1% compared with 2.4% and remained within our target range of 1% to 4%. Net new client assets and, to a lesser extent, net new loans were positive.

### Personnel

Personal & Corporate Banking employed 5,143 personnel as of 31 December 2016, an increase of 85 compared with 5,058 personnel as of 31 December 2015, mainly reflecting a shift of staff from Wealth Management to Personal & Corporate Banking.



# Asset Management

## Asset Management<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Results</b>				
Net management fees <sup>2</sup>	1,764	1,810	1,847	(3)
Performance fees	127	122	154	4
Gains on sale of subsidiaries and businesses	153		56	
<b>Total operating income</b>	<b>2,044</b>	1,931	2,057	6
Personnel expenses	716	727	729	(2)
General and administrative expenses	231	241	232	(4)
Services (to) / from Corporate Center and other business divisions	514	506	502	2
<i>of which: services from CC – Services</i>	<i>551</i>	<i>530</i>	<i>523</i>	<i>4</i>
Depreciation and impairment of property, equipment and software	1	1	2	0
Amortization and impairment of intangible assets	3	4	8	(25)
<b>Total operating expenses</b>	<b>1,466</b>	1,479	1,474	(1)
<b>Business division operating profit / (loss) before tax</b>	<b>578</b>	452	584	28
<b>Adjusted results<sup>3</sup></b>				
<b>Total operating income as reported</b>	<b>2,044</b>	1,931	2,057	6
<i>of which: gains on sale of subsidiaries and businesses</i>	<i>153</i>		<i>56</i>	
<b>Total operating income (adjusted)</b>	<b>1,891</b>	1,931	2,001	(2)
<b>Total operating expenses as reported</b>	<b>1,466</b>	1,479	1,474	(1)
<i>of which: personnel-related restructuring expenses</i>	<i>16</i>	<i>15</i>	<i>4</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>22</i>	<i>15</i>	<i>11</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>62</i>	<i>70</i>	<i>68</i>	
<b>Total operating expenses (adjusted)</b>	<b>1,366</b>	1,379	1,392	(1)
<b>Business division operating profit / (loss) before tax as reported</b>	<b>578</b>	452	584	28
<b>Business division operating profit / (loss) before tax (adjusted)</b>	<b>525</b>	552	610	(5)
<b>Key performance indicators<sup>4</sup></b>				
Pre-tax profit growth (%)	27.9	(22.6)	25.1	
Cost / income ratio (%)	71.7	76.6	71.7	
Net new money growth excluding money market flows (%)	8.1	(3.8)	(0.1)	
Gross margin on invested assets (bps)	29	30	32	(3)
Net margin on invested assets (bps)	8	7	9	14
<b>Adjusted key performance indicators<sup>3,4</sup></b>				
Pre-tax profit growth (%)	(4.9)	(9.5)	19.8	
Cost / income ratio (%)	72.2	71.4	69.6	
Net new money growth excluding money market flows (%)	8.1	(3.8)	(0.1)	
Gross margin on invested assets (bps)	26	30	31	(13)
Net margin on invested assets (bps)	7	9	9	(22)
<b>Information by business line / asset class<sup>5</sup></b>				
<b>Net new money (CHF billion)</b>				
Equities	18.5	(9.9)	(16.3)	
Fixed Income	28.1	(3.0)	(3.2)	
<i>of which: money market</i>	<i>10.6</i>	<i>7.0</i>	<i>(4.7)</i>	
Multi Assets & Solutions	4.9	(4.2)	6.5	
Hedge Fund Businesses	2.2	(0.3)	4.3	
Real Estate & Private Markets	5.0	1.8	3.2	
<b>Total net new money</b>	<b>58.7</b>	(15.5)	(5.4)	

## Asset Management (continued)<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Invested assets (CHF billion)</b>				
Equities	293	220	219	33
Fixed Income	242	210	208	15
<i>of which: money market</i>	76	66	58	15
Multi Assets & Solutions	126	121	123	4
Hedge Fund Businesses	41	39	39	5
Real Estate & Private Markets	74	67	62	10
<b>Total invested assets</b>	<b>776</b>	<b>656</b>	<b>650</b>	<b>18</b>
<i>of which: passive strategies</i>	286	207	197	38

### Information by region

Invested assets (CHF billion)				
Americas	183	160	152	14
Asia Pacific	159	129	136	23
Europe, Middle East and Africa	174	143	143	22
Switzerland	261	225	219	16
<b>Total invested assets</b>	<b>776</b>	<b>656</b>	<b>650</b>	<b>18</b>

### Information by channel

Invested assets (CHF billion)				
Third-party institutional	486	395	383	23
Third-party wholesale	80	75	71	7
UBS's wealth management businesses	210	186	196	13
<b>Total invested assets</b>	<b>776</b>	<b>656</b>	<b>650</b>	<b>18</b>

### Assets under administration<sup>6</sup>

Assets under administration (CHF billion) <sup>7</sup>		420	407	
Net new assets under administration (CHF billion) <sup>8</sup>		0.3	24.0	
Gross margin on assets under administration (bps)		3	5	

### Additional information

Average attributed equity (CHF billion) <sup>9</sup>	1.7	1.4	1.6	21
Return on attributed equity (%) <sup>9</sup>	34.0	32.3	36.5	
Return on attributed tangible equity (%) <sup>9</sup>	184.6			
Risk-weighted assets (CHF billion) <sup>9</sup>	4.0	3.9	2.6	3
<i>of which: held by Asset Management (CHF billion)</i>	3.9	3.9	2.6	0
<i>of which: held by CC – Group ALM on behalf of Asset Management (CHF billion)<sup>10</sup></i>	0.1			
Leverage ratio denominator (CHF billion) <sup>9</sup>	4.8	2.7	2.7	78
<i>of which: held by Asset Management (CHF billion)</i>	2.7	2.7	2.7	0
<i>of which: held by CC – Group ALM on behalf of Asset Management (CHF billion)<sup>10</sup></i>	2.1			
Goodwill and intangible assets (CHF billion)	1.4	1.4	1.4	0
Personnel (full-time equivalents)	2,335	2,308	2,277	1

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Net management fees include transaction fees, fund administration revenues (including net interest and trading income from lending activities and foreign exchange hedging as part of the fund services offering), gains or losses from seed money and co-investments, funding costs, and other items that are not performance fees. <sup>3</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>4</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>5</sup> As of 1 January 2017, Asset Management was reorganized into the following business lines: Equities, Fixed Income, Multi Assets & Solutions, Hedge Fund Businesses and Real Estate & Private Markets. Prior-period figures are presented in accordance with this new structure. <sup>6</sup> Following the sale of our fund administration servicing units in Luxembourg and Switzerland to Northern Trust on 1 October 2017, we no longer report assets under administration. <sup>7</sup> Includes UBS and third-party fund assets for which the fund services unit provided professional services, including fund setup, accounting and reporting for traditional investment funds and alternative funds. <sup>8</sup> Inflows of assets under administration from new and existing funds less outflows from existing funds or fund exits. <sup>9</sup> Refer to the "Capital management" section of this report for more information. <sup>10</sup> Represents risk-weighted assets and leverage ratio denominator held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information.

## 2017 compared with 2016

### Results

Profit before tax increased by CHF 126 million or 28% to CHF 578 million, primarily driven by a gain of CHF 153 million on the sale of our fund administration servicing units in Luxembourg and Switzerland to Northern Trust. Excluding this gain, adjusted profit before tax decreased by CHF 27 million or 5% to CHF 525 million, primarily reflecting lower operating income.

### Operating income

Total operating income increased by CHF 113 million or 6% to CHF 2,044 million. Excluding the aforementioned gain on sale of our fund administration servicing units, adjusted operating income decreased by CHF 40 million or 2%. Net management fees decreased by CHF 46 million to CHF 1,764 million, reflecting lower revenues following the aforementioned sale, the positive effect of fee true-ups of CHF 17 million in 2016 as well as an impairment loss of CHF 13 million on a co-investment in an infrastructure fund, partly offset by the effect of higher average invested assets. Performance fees increased by CHF 5 million to CHF 127 million, with a decline in Real Estate being more than offset by Equities and our hedge fund businesses.

As of 31 December 2017, approximately 71% of performance fee-eligible assets within our hedge fund businesses exceeded high-water marks compared with 43%.

### Operating expenses

Total operating expenses and adjusted operating expenses decreased by CHF 13 million to CHF 1,466 million and CHF 1,366 million, respectively.

Personnel expenses decreased by CHF 11 million to CHF 716 million and adjusted personnel expenses decreased by CHF 12 million to CHF 700 million, mainly driven by lower salary costs.

General and administrative expenses decreased by CHF 10 million to CHF 231 million. Adjusted general and administrative expenses decreased by CHF 17 million to CHF 209 million, mainly driven by lower professional fees.

Net expenses for services from Corporate Center and other business divisions increased by CHF 8 million to CHF 514 million. Adjusted net expenses for services from Corporate Center and other business divisions increased by CHF 16 million, mainly driven by higher expenses from Group Risk Control as well as increased costs for occupancy and strategic and regulatory initiatives.

### Cost / income ratio

The cost / income ratio was 71.7% compared with 76.6%. On an adjusted basis, the cost / income ratio was 72.2% compared with 71.4%, and was above our 2017 target range of 60% to 70%.

### Net new money

Excluding money market flows, net new money was CHF 48.1 billion compared with outflows of CHF 22.5 billion, primarily driven by our third-party institutional channel. The net new money growth rate was positive 8.1% compared with negative 3.8% and was above our 2017 target range of 3% to 5%. Net inflows were mainly driven by Switzerland and Asia Pacific.

### Invested assets

Invested assets increased to CHF 776 billion from CHF 656 billion, mainly due to positive market performance of CHF 65 billion and net new money inflows of CHF 59 billion, including money market flows, partly offset by negative foreign currency translation effects of CHF 1 billion.

As of 31 December 2017, CHF 286 billion or 37% of invested assets were managed in passive strategies, while CHF 414 billion or 53% of invested assets were managed in active, non-money market strategies. The remaining CHF 76 billion or 10% of invested assets were managed in money market strategies. On a regional basis, 34% of invested assets related to clients serviced from Switzerland, 24% from the Americas, 22% from Europe, Middle East and Africa, and 20% from Asia Pacific.

### Assets under administration

The aforementioned sale of our fund administration servicing units in Luxembourg and Switzerland to Northern Trust concluded our exit from this line of business.

### Personnel

Asset Management employed 2,335 personnel as of 31 December 2017 compared with 2,308 personnel as of 31 December 2016.

## Investment performance

The market environment in 2017 was generally supportive for investments. Asset class correlations and market volatility fell as favorable financial conditions supported global economic growth but inflationary pressures remain subdued.

For 2017, 89% of our active traditional funds outperformed their benchmark and 67% outperformed peer averages. Long-term performance is strong, with 85% outperforming their benchmark and 80% outperforming peer averages over 5 years.

### Investment performance as of 31 December 2017

	Annualized		
	1 year	3 years	5 years
<b>Active funds versus benchmark</b>			
<i>Percentage of fund assets exceeding benchmark</i>			
Equities <sup>1</sup>	74	65	75
Fixed income <sup>1</sup>	97	95	87
Multi-asset <sup>1</sup>	98	89	93
<b>Total traditional investments</b>	<b>89</b>	<b>83</b>	<b>85</b>
<b>Active funds versus peers</b>			
<i>Percentage of fund assets ranking in first or second quartile / exceeding peer index</i>			
Equities <sup>1</sup>	70	71	78
Fixed income <sup>1</sup>	54	77	74
Multi-asset <sup>1</sup>	74	81	89
<b>Total traditional investments</b>	<b>67</b>	<b>76</b>	<b>80</b>
<b>Passive funds tracking accuracy</b>			
<i>Percentage of passive fund assets within applicable tracking tolerance</i>			
All asset classes <sup>2</sup>	91	89	93

<sup>1</sup> Percentage of active fund assets above benchmark (gross of fees) / peer median. Based on the universe of European domiciled active wholesale funds available to UBS's wealth management businesses and other wholesale intermediaries as of 31 December 2017. Source of comparison versus peers: Thomson Reuters LIM (Lipper Investment Management). Source of comparison versus benchmark: UBS. Universe represents approximately 72% of all active fund assets and 17% of all actively managed assets (including segregated accounts) in these asset classes globally as of 31 December 2017. <sup>2</sup> Percentage of passive fund assets within applicable tracking tolerance on a gross of fees basis. Tracking accuracy information represents a universe of European domiciled institutional and wholesale funds representing approximately 44% of our total passive invested assets as of 31 December 2017. Source: UBS.

## 2016 compared with 2015

### Results

Profit before tax decreased by CHF 132 million or 23% to CHF 452 million, partly as 2015 included a gain of CHF 56 million on the sale of our Alternative Fund Services (AFS) business. Adjusted profit before tax decreased by CHF 58 million or 10% to CHF 552 million, primarily reflecting lower operating income.

### Operating income

Total operating income decreased by CHF 126 million or 6% to CHF 1,931 million. Excluding the aforementioned gain on sale of our AFS business, adjusted operating income decreased by CHF 70 million or 3%. Adjusted net management fees decreased by CHF 37 million to CHF 1,810 million, mainly in Fund Services, reflecting the reduced size of our Fund Services business following the sale of AFS. This was partly offset by an increase in Global Real Estate. Performance fees decreased by CHF 32 million to CHF 122 million, primarily in Equities, Multi Asset & O'Connor.

As of 31 December 2016, approximately 43% of performance fee-eligible assets within our hedge fund businesses exceeded high-water marks compared with 26%.

### Operating expenses

Total operating expenses increased by CHF 5 million to CHF 1,479 million and adjusted operating expenses decreased by CHF 13 million or 1% to CHF 1,379 million.

Personnel expenses decreased by CHF 2 million to CHF 727 million and adjusted personnel expenses decreased by CHF 13 million to CHF 712 million. The decrease in adjusted personnel expenses was mainly driven by lower variable compensation expenses and lower salary costs as a result of the aforementioned sale of our AFS business, partly offset by higher average staffing levels, primarily in distribution and investments areas.

General and administrative expenses increased by CHF 9 million to CHF 241 million. Adjusted general and administrative expenses increased by CHF 3 million to CHF 226 million, mainly driven by higher professional fees and increased costs for market data services, partly offset by lower travel and entertainment expenses.

### Cost / income ratio

The cost / income ratio was 76.6% compared with 71.7%. On an adjusted basis, the cost / income ratio was 71.4% compared with 69.6%, and was above our target range of 60% to 70%.

### Net new money

Excluding money market flows, net new money outflows were CHF 22.5 billion compared with CHF 0.7 billion, which resulted in a negative net new money growth rate of 3.8% compared with negative 0.1%, below our target range of 3% to 5%. By client segment, net outflows from third parties were CHF 12.5 billion, which included a CHF 7.2 billion pricing-related outflow from one client and asset allocation changes, compared with CHF 7.7 billion. Net outflows were mainly from clients serviced from Asia Pacific, the Americas and Europe, partly offset by inflows in Switzerland. Net new money outflows from clients of UBS's wealth management businesses were CHF 10.0 billion compared with inflows of CHF 7.0 billion, largely driven by changes in asset allocation in the fourth quarter of 2016.

### Invested assets

Invested assets increased to CHF 656 billion from CHF 650 billion, reflecting positive market performance of CHF 22 billion, partly offset by net new money outflows of CHF 16 billion.

As of 31 December 2016, CHF 385 billion or 59% of invested assets were managed in active, non-money market strategies and CHF 206 billion, or 31%, of invested assets were managed in passive strategies. The remaining CHF 66 billion, or 10%, were managed in money market assets. On a regional basis, 34% of invested assets related to clients serviced from Switzerland, 24% from the Americas, 22% from Europe, Middle East and Africa, and 20% from Asia Pacific.

### Assets under administration

Total assets under administration increased to CHF 420 billion from CHF 407 billion, primarily reflecting positive market performance of CHF 13 billion.

### Personnel

Asset Management employed 2,308 personnel as of 31 December 2016 compared with 2,277 personnel as of 31 December 2015.

# Investment Bank

## Investment Bank<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Results</b>				
<b>Corporate Client Solutions</b>	<b>2,813</b>	2,382	2,960	18
Advisory	636	691	709	(8)
Equity Capital Markets	1,054	674	1,047	56
Debt Capital Markets	782	740	691	6
Financing Solutions	307	360	441	(15)
Risk Management	35	(84)	73	
<b>Investor Client Services</b>	<b>4,928</b>	5,318	5,929	(7)
Equities	3,546	3,486	3,962	2
Foreign Exchange, Rates and Credit	1,382	1,831	1,967	(25)
Income	7,740	7,699	8,889	1
Credit loss (expense) / recovery	(90)	(11)	(68)	718
<b>Total operating income</b>	<b>7,651</b>	7,688	8,821	0
Personnel expenses	2,949	3,082	3,220	(4)
General and administrative expenses	662	805	841	(18)
Services (to) / from Corporate Center and other business divisions	2,769	2,765	2,817	0
<i>of which: services from CC – Services</i>	<i>2,676</i>	<i>2,675</i>	<i>2,731</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	10	21	26	(52)
Amortization and impairment of intangible assets	12	12	24	0
<b>Total operating expenses</b>	<b>6,402</b>	6,684	6,929	(4)
<b>Business division operating profit / (loss) before tax</b>	<b>1,249</b>	1,004	1,892	24
<b>Adjusted results<sup>2</sup></b>				
<b>Total operating income as reported</b>	<b>7,651</b>	7,688	8,821	0
<i>of which: gains on sale of financial assets available for sale<sup>3</sup></i>	<i>136</i>	<i>78</i>	<i>11</i>	
<b>Total operating income (adjusted)</b>	<b>7,515</b>	7,610	8,810	(1)
<b>Total operating expenses as reported</b>	<b>6,402</b>	6,684	6,929	(4)
<i>of which: personnel-related restructuring expenses</i>	<i>38</i>	<i>154</i>	<i>14</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>18</i>	<i>14</i>	<i>7</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>303</i>	<i>410</i>	<i>376</i>	
<i>of which: impairment of an intangible asset</i>			<i>11</i>	
<i>of which: expenses from modification of terms for certain DCCP awards<sup>4</sup></i>	<i>25</i>			
<b>Total operating expenses (adjusted)</b>	<b>6,018</b>	6,107	6,522	(1)
<b>Business division operating profit / (loss) before tax as reported</b>	<b>1,249</b>	1,004	1,892	24
<b>Business division operating profit / (loss) before tax (adjusted)</b>	<b>1,497</b>	1,503	2,288	0

Investment Bank (continued)<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Key performance indicators<sup>5</sup></b>				
Pre-tax profit growth (%)	24.4	(46.9)		
Cost / income ratio (%)	82.7	86.8	78.0	
Return on attributed equity (%) <sup>6</sup>	13.4	13.1	25.9	
<b>Adjusted key performance indicators<sup>2,5</sup></b>				
Pre-tax profit growth (%)	(0.4)	(34.3)		
Cost / income ratio (%)	79.1	80.1	73.5	
Return on attributed equity (%) <sup>6</sup>	16.0	19.6	31.3	
<b>Additional information</b>				
Total assets (CHF billion) <sup>7</sup>	262.9	242.3	253.5	9
Average attributed equity (CHF billion) <sup>6</sup>	9.3	7.7	7.3	21
Return on attributed tangible equity (%) <sup>6</sup>	13.6			
Risk-weighted assets (CHF billion) <sup>8</sup>	75.0	70.4	62.9	7
<i>of which: held by the Investment Bank (CHF billion)</i>	74.5	70.4	62.9	6
<i>of which: held by CC – Group ALM on behalf of the Investment Bank (CHF billion)<sup>8</sup></i>	0.5			
Return on risk-weighted assets, gross (%) <sup>9</sup>	10.6	11.9	13.7	
Leverage ratio denominator (CHF billion) <sup>8</sup>	283.6	231.2	268.0	23
<i>of which: held by the Investment Bank (CHF billion)</i>	264.1	231.2	268.0	14
<i>of which: held by CC – Group ALM on behalf of the Investment Bank (CHF billion)<sup>8</sup></i>	19.4			
Return on leverage ratio denominator, gross (%) <sup>9</sup>	2.8	3.0	3.1	
Goodwill and intangible assets (CHF billion)	0.1	0.1	0.1	0
Compensation ratio (%)	38.1	40.0	36.2	
Average VaR (1-day, 95% confidence, 5 years of historical data)	9	9	12	0
Impaired loan portfolio as a percentage of total loan portfolio, gross (%) <sup>10</sup>	1.0	0.9	1.5	
Personnel (full-time equivalents)	4,822	4,734	5,243	2

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>3</sup> Reflects gains on sales of our investment in IHS Markit in 2017, 2016 and 2015 as well as a gain on the sale of our investment in London Clearing House in 2017. <sup>4</sup> Relates to the removal of the service period requirement for DCCP awards granted for the performance years 2012 and 2013. <sup>5</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>6</sup> Refer to the "Capital management" section of this report for more information. <sup>7</sup> Based on third-party view, i.e., without intercompany balances. <sup>8</sup> Represents risk-weighted assets (RWA) and leverage ratio denominator (LRD) held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information. <sup>9</sup> Based on total RWA and LRD. Figures for 31 December 2016 and 31 December 2015 are based on RWA and LRD held by the Investment Bank and are therefore not fully comparable. <sup>10</sup> Refer to the "Risk management and control" section of this report for more information on impaired loan exposures.

## 2017 compared with 2016

### Results

Profit before tax increased by CHF 245 million or 24% to CHF 1,249 million, due to lower operating expenses. Adjusted profit before tax was broadly unchanged at CHF 1,497 million, primarily due to lower operating income, largely offset by lower operating expenses.

#### Operating income

Total operating income decreased by CHF 37 million to CHF 7,651 million. Excluding gains of CHF 78 million in 2016 and CHF 107 million in 2017 related to sales of our investment in IHS Markit and a gain of CHF 29 million in 2017 related to the sale of our investment in London Clearing House, adjusted total operating income decreased by CHF 95 million or 1% to CHF 7,515 million from CHF 7,610 million, mainly reflecting CHF 448 million lower revenues in Investor Client Services, mostly offset by CHF 431 million increased revenues in Corporate Client Solutions. Net credit loss expense was CHF 90 million compared with CHF 11 million, mainly related to a margin loan to a single client following a significant decrease in the value of the collateral. In US dollar terms, adjusted operating income decreased 1%.

→ Refer to the “Risk management and control” section of this report for more information on credit loss expenses

#### Operating income by business unit:

##### Corporate Client Solutions

Corporate Client Solutions revenues increased by CHF 431 million or 18% to CHF 2,813 million, largely due to higher revenues in Equity Capital Markets. In US dollar terms, revenues increased 19%.

Advisory revenues decreased by CHF 55 million to CHF 636 million, reflecting lower revenues from private transactions, and lower revenues from merger and acquisition transactions against a global fee pool decline of 2%.

Equity Capital Markets revenues increased by CHF 380 million to CHF 1,054 million, mainly due to higher revenues from public offerings as the global fee pool increased 31% as well as higher revenues from private transactions.

Debt Capital Markets revenues increased by CHF 42 million to CHF 782 million, largely due to higher revenues from leveraged finance against a global fee pool increase of 11%. This increase was partly offset by lower investment grade revenues.

Financing Solutions revenues decreased by CHF 53 million to CHF 307 million, reflecting lower client activity across all products.

Risk Management revenues were positive CHF 35 million compared with negative CHF 84 million, mainly due to lower costs related to portfolio hedges.

##### Investor Client Services

Investor Client Services revenues decreased by CHF 390 million or 7% to CHF 4,928 million. Excluding the aforementioned gains totaling CHF 136 million in 2017 and CHF 78 million in 2016, adjusted revenues decreased by CHF 448 million or 9% to CHF 4,792 million due to lower revenues in Foreign Exchange, Rates and Credit businesses. In US dollar terms, adjusted revenues decreased 8%.

##### Equities

Equities revenues increased by CHF 60 million to CHF 3,546 million. Excluding a gain of CHF 27 million in 2017 related to sales of our investment in IHS Markit and a gain of CHF 29 million in 2017 related to the sale of our investment in London Clearing House, adjusted revenues increased by CHF 4 million to CHF 3,490 million.

Adjusted Cash revenues decreased by CHF 27 million to CHF 1,198 million, due to lower trading revenues.

Derivatives revenues increased by CHF 146 million to CHF 868 million, reflecting increased client activity levels and stronger trading revenues.

Adjusted Financing Services revenues decreased by CHF 81 million to CHF 1,448 million, due to weaker trading revenues in Equity Finance.

##### Foreign Exchange, Rates and Credit

Foreign Exchange, Rates and Credit revenues decreased by CHF 449 million to CHF 1,382 million. Excluding gains of CHF 80 million in 2017 and CHF 78 million in 2016 related to sales of our investment in IHS Markit, adjusted revenues decreased to CHF 1,302 million from CHF 1,753 million, mainly due to reduced client activity across the majority of products reflecting persistent low market volatility.

##### Operating expenses

Total operating expenses decreased by CHF 282 million or 4% to CHF 6,402 million, and adjusted operating expenses decreased by CHF 89 million or 1% to CHF 6,018 million. In US dollar terms, adjusted operating expenses also decreased 1%.

Personnel expenses decreased to CHF 2,949 million from CHF 3,082 million, and adjusted personnel expenses decreased to CHF 2,886 million from CHF 2,928 million, mainly due to lower salary expenses as a result of our cost reduction programs, partly offset by higher variable compensation expenses. In addition, 2017 included an expense of CHF 25 million related to the modification of terms of Deferred Contingent Capital Plan awards granted for the performance years 2012 and 2013. This was treated as an adjusting item.

General and administrative expenses decreased to CHF 662 million from CHF 805 million and on an adjusted basis decreased to CHF 644 million from CHF 791 million, mainly due to CHF 83 million lower expenses for provisions for litigation, regulatory and similar matters. In addition, the net expense for the UK bank levy was CHF 33 million compared with a net expense of CHF 80 million, primarily as 2017 included a CHF 49 million credit related to prior years.



Net expenses for services from Corporate Center and other business divisions were broadly unchanged at CHF 2,769 million and on an adjusted basis increased to CHF 2,466 million from CHF 2,355 million, mainly due to higher costs for strategic and regulatory initiatives and higher net expenses from Group Technology and Group Risk Control.

#### Cost / income ratio

The cost / income ratio decreased to 82.7% from 86.8%. On an adjusted basis, the cost / income ratio decreased to 79.1% from 80.1% and was within our target range of 70% to 80%.

#### Return on attributed equity

Return on attributed equity (RoAE) for 2017 was 13.4%, and 16.0% on an adjusted basis, above our target of over 15%.

→ Refer to “Equity attribution and return on attributed equity” in the “Capital management” section of this report for more information

#### Risk-weighted assets

Risk weighted assets (RWA) held by the Investment Bank increased by CHF 4.1 billion to CHF 74.5 billion as of 31 December 2017, driven by an increase in credit and counterparty credit risk RWA, mostly due to model updates and regulatory add-ons, partly offset by a decrease in market risk RWA. Total RWA, including RWA held by Corporate Center – Group Asset and Liability Management (Group ALM) on behalf of the Investment Bank, was CHF 75.0 billion as of 31 December 2017, below our 2017 short- to medium-term expectation of around CHF 85 billion.

→ Refer to the “Capital management” section of this report for more information

#### Leverage ratio denominator

The leverage ratio denominator (LRD) held by the Investment Bank increased by CHF 33 billion to CHF 264 billion as of 31 December 2017, mainly due to higher trading portfolio assets, reflecting client-driven increases and higher equity markets, and an increase in financial assets designated at fair value, available for sale and held to maturity. These increases were partly offset by lower off-balance sheet and net derivative exposures. Total LRD, including LRD held by Corporate Center – Group ALM on behalf of the Investment Bank, was CHF 284 billion as of 31 December 2017 and remained below our 2017 short- to medium-term expectation of around CHF 325 billion.

→ Refer to the “Capital management” section of this report for more information

#### Personnel

The Investment Bank employed 4,822 personnel as of 31 December 2017, an increase of 88 compared with 4,734 as of 31 December 2016, primarily due to the transfer of business-aligned personnel in our Business Solutions Centers from Corporate Center to the Investment Bank, partly offset by a decrease as a result of our cost reduction programs.

## 2016 compared with 2015

### Results

Profit before tax decreased by CHF 888 million or 47% to CHF 1,004 million, and adjusted profit before tax decreased by CHF 785 million or 34% to CHF 1,503 million, primarily due to lower operating income, partly offset by lower operating expenses.

#### Operating income

Total operating income decreased by CHF 1,133 million or 13% to CHF 7,688 million. On an adjusted basis, excluding gains related to partial sales of our investment in IHS Markit of CHF 78 million in 2016 and CHF 11 million in 2015, total operating income decreased by CHF 1,200 million or 14% to CHF 7,610 million from CHF 8,810 million, as revenues in Investor Client Services decreased by CHF 678 million and revenues in Corporate Client Solutions decreased by CHF 578 million. Net credit loss expense was CHF 11 million compared with CHF 68 million, reflecting lower expenses related to the energy sector. In US dollar terms, adjusted operating income decreased 16%.

#### Operating income by business unit:

##### Corporate Client Solutions

Corporate Client Solutions revenues decreased by CHF 578 million or 20% to CHF 2,382 million, largely due to lower revenues in Equity Capital Markets, Risk Management and Financing Solutions. In US dollar terms, revenues decreased 22%.

Advisory revenues decreased by CHF 18 million to CHF 691 million, reflecting lower revenues from private transactions, partly offset by increased revenues from merger and acquisition transactions against a broadly unchanged global fee pool.

Equity Capital Markets revenues decreased by CHF 373 million to CHF 674 million, mainly due to lower revenues from public offerings as the global fee pool declined 25%, as well as lower revenues from private transactions.

Debt Capital Markets revenues increased by CHF 49 million to CHF 740 million, largely due to higher revenues from leveraged finance against a global fee pool decline of 2%. This increase was partly offset by lower investment grade revenues.

Financing Solutions revenues decreased by CHF 81 million to CHF 360 million, mainly reflecting lower structured finance revenues.

Risk Management revenues were negative CHF 84 million compared with positive CHF 73 million, mainly due to losses on portfolio macro hedges largely reflecting tightening credit spreads.

##### Investor Client Services

Investor Client Services revenues decreased by CHF 611 million or 10% to CHF 5,318 million. Excluding the aforementioned gains of CHF 78 million in 2016 and CHF 11 million in 2015, adjusted revenues decreased by CHF 678 million or 11% to CHF 5,240 million due to lower revenues in both the Equities and Foreign Exchange, Rates and Credit businesses. In US dollar terms, adjusted revenues decreased 14%.

##### Equities

Equities revenues decreased by CHF 476 million to CHF 3,486 million.

Cash revenues decreased by CHF 146 million to CHF 1,225 million, mainly due to lower trading revenues.

Derivatives revenues decreased by CHF 324 million to CHF 722 million, reflecting lower client activity levels and weaker trading revenues.

Financing Services revenues decreased by CHF 52 million to CHF 1,529 million, due to weaker trading revenues in Equity Finance from a strong 2015.

##### Foreign Exchange, Rates and Credit

Foreign Exchange, Rates and Credit revenues decreased by CHF 136 million to CHF 1,831 million. Excluding the aforementioned gain of CHF 78 million compared with CHF 11 million, adjusted revenues decreased to CHF 1,753 million from CHF 1,956 million, mainly as the first quarter of 2015 benefited from higher volatility and client activity levels following the Swiss National Bank's actions in January 2015.

##### Operating expenses

Total operating expenses decreased by CHF 245 million or 4% to CHF 6,684 million, and adjusted operating expenses decreased by CHF 415 million or 6% to CHF 6,107 million. In US dollar terms, adjusted operating expenses decreased 9%.

Personnel expenses decreased to CHF 3,082 million from CHF 3,220 million, and adjusted personnel expenses decreased to CHF 2,928 million from CHF 3,206 million, mainly due to lower variable compensation expenses and lower salary expenses as a result of our cost reduction programs.

General and administrative expenses decreased to CHF 805 million from CHF 841 million and on an adjusted basis decreased to CHF 791 million from CHF 834 million, mainly due to reduced professional fees and travel and entertainment expenses, partly offset by CHF 44 million higher expenses for provisions for litigation, regulatory and similar matters. The expense for the annual UK bank levy was CHF 80 million compared with CHF 98 million.

Net expenses for services from Corporate Center and other business divisions decreased to CHF 2,765 million from CHF 2,817 million and on an adjusted basis decreased to CHF 2,355 million from CHF 2,441 million.

#### Cost / income ratio

The cost / income ratio increased to 86.8% from 78.0%. On an adjusted basis, the cost / income ratio increased to 80.1% from 73.5% and was slightly above our target range of 70% to 80%.

#### Return on attributed equity

Return on attributed equity (RoAE) for 2016 was 13.1%, and 19.6% on an adjusted basis, above our target of over 15%.

#### Risk-weighted assets

RWA increased by CHF 7.5 billion to CHF 70.4 billion as of 31 December 2016, below our short- to medium-term expectation of around CHF 85 billion. The increase was driven by an increase of CHF 3.5 billion in market risk RWA as well as increases of CHF 2.7 billion in operational risk RWA and CHF 1.5 billion in credit risk RWA.

#### Leverage ratio denominator

The LRD decreased by CHF 37 billion to CHF 231 billion as of 31 December 2016 and remained below our short- to medium-term expectation of around CHF 325 billion. The reduction during 2016 was mainly due to effective resource management.

#### Personnel

The Investment Bank employed 4,734 personnel as of 31 December 2016, a decrease of 509 compared with 5,243 as of 31 December 2015, largely reflecting our cost reduction programs.

# Corporate Center

## Corporate Center<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.17	31.12.16	31.12.15	31.12.16
<b>Results</b>				
<b>Total operating income</b>	<b>(451)</b>	(357)	315	26
Personnel expenses	3,862	3,899	4,049	(1)
General and administrative expenses	4,387	4,893	5,311	(10)
Services (to) / from business divisions	(8,071)	(7,933)	(7,894)	2
Depreciation and impairment of property, equipment and software	1,004	944	868	6
Amortization and impairment of intangible assets	7	21	21	(67)
<b>Total operating expenses</b>	<b>1,189</b>	1,824	2,354	(35)
<b>Operating profit / (loss) before tax</b>	<b>(1,640)</b>	(2,181)	(2,040)	(25)
<b>Adjusted results<sup>2</sup></b>				
<b>Total operating income as reported</b>	<b>(451)</b>	(357)	315	26
<i>of which: own credit on financial liabilities designated at fair value</i>			553	
<i>of which: gain on sales of real estate</i>		120	378	
<i>of which: net gain / (loss) related to the buyback of debt</i>			(257)	
<i>of which: net foreign currency translation gain / (loss)<sup>3</sup></i>	(22)	(122)	88	
<b>Total operating income (adjusted)</b>	<b>(429)</b>	(355)	(447)	21
<b>Total operating expenses as reported</b>	<b>1,189</b>	1,824	2,354	(35)
<i>of which: personnel-related restructuring expenses</i>	434	519	420	
<i>of which: non-personnel-related restructuring expenses</i>	522	623	719	
<i>of which: restructuring expenses allocated from CC – Services</i>	(926)	(1,064)	(943)	
<b>Total operating expenses (adjusted)</b>	<b>1,159</b>	1,746	2,158	(34)
<b>Operating profit / (loss) before tax as reported</b>	<b>(1,640)</b>	(2,181)	(2,040)	(25)
<b>Operating profit / (loss) before tax (adjusted)</b>	<b>(1,588)</b>	(2,101)	(2,606)	(24)
<b>Additional information</b>				
Average attributed equity (CHF billion) <sup>4</sup>	22.9	29.1	25.8	(21)
Total assets (CHF billion) <sup>5</sup>	312.8	359.4	354.5	(13)
Risk-weighted assets (fully applied, CHF billion) <sup>4,6</sup>	56.5	57.1	60.2	(1)
Leverage ratio denominator (fully applied, CHF billion) <sup>4,6</sup>	271.4	300.7	291.2	(10)
Personnel (full-time equivalents)	25,817	23,955	23,671	8

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>3</sup> Related to the disposal of foreign subsidiaries and branches. <sup>4</sup> Refer to the "Capital management" section of this report for more information. <sup>5</sup> Based on third-party view, i.e., without intercompany balances. <sup>6</sup> Prior to attributions to business divisions and other Corporate Center units for the purpose of attributing equity.

# Corporate Center – Services

## Corporate Center – Services<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Results</b>				
<b>Total operating income</b>	<b>(153)</b>	(102)	241	50
Personnel expenses	3,785	3,801	3,903	0
General and administrative expenses	4,247	4,145	4,483	2
Depreciation and impairment of property, equipment and software	1,004	944	868	6
Amortization and impairment of intangible assets	7	21	21	(67)
<b>Total operating expenses before allocations to BDs and other CC units</b>	<b>9,043</b>	8,911	9,274	1
Services (to) / from business divisions and other CC units	(8,281)	(8,164)	(8,215)	1
of which: services to Wealth Management	(2,294)	(2,256)	(2,209)	2
of which: services to Wealth Management Americas	(1,262)	(1,221)	(1,193)	3
of which: services to Personal & Corporate Banking	(1,227)	(1,186)	(1,180)	3
of which: services to Asset Management	(551)	(530)	(523)	4
of which: services to Investment Bank	(2,676)	(2,675)	(2,731)	0
of which: services to CC – Group ALM	(142)	(110)	(96)	29
of which: services to CC – Non-core and Legacy Portfolio	(194)	(225)	(313)	(14)
<b>Total operating expenses</b>	<b>762</b>	747	1,059	2
<b>Operating profit / (loss) before tax</b>	<b>(914)</b>	(849)	(818)	8
<b>Adjusted results<sup>2</sup></b>				
<b>Total operating income as reported</b>	<b>(153)</b>	(102)	241	50
of which: gain on sales of real estate		120	378	
<b>Total operating income (adjusted)</b>	<b>(153)</b>	(222)	(137)	(31)
<b>Total operating expenses as reported before allocations</b>	<b>9,043</b>	8,911	9,274	1
of which: personnel-related restructuring expenses	433	518	406	
of which: non-personnel-related restructuring expenses	522	623	719	
<b>Total operating expenses (adjusted) before allocations</b>	<b>8,088</b>	7,770	8,151	4
Services (to) / from BDs and other CC units	(8,281)	(8,164)	(8,215)	1
of which: restructuring expenses allocated to BDs and other CC units	(935)	(1,084)	(986)	
<b>Total operating expenses as reported after allocations</b>	<b>762</b>	747	1,059	2
<b>Total operating expenses (adjusted) after allocations</b>	<b>743</b>	690	919	8
<b>Operating profit / (loss) before tax as reported</b>	<b>(914)</b>	(849)	(818)	8
<b>Operating profit / (loss) before tax (adjusted)</b>	<b>(895)</b>	(912)	(1,056)	(2)
<b>Additional information</b>				
Average attributed equity (CHF billion) <sup>3</sup>	18.9	22.8	19.6	(17)
Total assets (CHF billion) <sup>4</sup>	20.9	23.7	22.6	(12)
Risk-weighted assets (fully applied, CHF billion) <sup>3</sup>	29.2	27.6	23.6	6
of which: held by CC – Services (fully applied, CHF billion)	29.2	27.6	23.6	6
Leverage ratio denominator (fully applied, CHF billion) <sup>3</sup>	6.8	5.8	4.8	17
of which: held by CC – Services (fully applied, CHF billion)	6.7	5.8	4.8	16
of which: held by CC – Group ALM on behalf of CC – Services (fully applied, CHF billion) <sup>5</sup>	0.1			
Personnel (full-time equivalents)	25,623	23,750	23,470	8

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>3</sup> Refer to the "Capital management" section of this report for more information. <sup>4</sup> Based on third-party view, i.e., without intercompany balances. <sup>5</sup> Represents leverage ratio denominator held by Corporate Center – Group ALM that is directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, this resource is allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information.

## 2017 compared with 2016

Corporate Center – Services recorded a loss before tax of CHF 914 million compared with CHF 849 million, and CHF 895 million on an adjusted basis compared with CHF 912 million.

### Operating income

Operating income was negative CHF 153 million compared with negative CHF 102 million, partly as 2016 recorded gains on sales of real estate of CHF 120 million. On an adjusted basis, operating income was negative CHF 153 million compared with negative CHF 222 million, mainly due to higher treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM), resulting from a change made in the first quarter of 2017 to the methodology used to allocate revenues from the investment of equity and the funding costs for long-term debt that contributes to total loss-absorbing capacity. This was partly offset by higher funding costs relating to Corporate Center – Services' balance sheet assets.

### Operating expenses

#### *Operating expenses before service allocations to business divisions and other Corporate Center units*

Before service allocations to business divisions and other Corporate Center units, total operating expenses increased by CHF 132 million or 1% to CHF 9,043 million. Restructuring expenses were CHF 955 million compared with CHF 1,141 million and mainly related to our transitioning activities to nearshore and offshore locations, as well as outsourcing of IT and other services. Adjusted operating expenses before allocations increased by CHF 318 million or 4% to CHF 8,088 million.

Personnel expenses decreased by CHF 16 million to CHF 3,785 million. Excluding restructuring expenses, adjusted personnel expense increased by CHF 69 million to CHF 3,352 million, mainly driven by increased staffing levels and insourcing of certain activities from third-party vendors to our Business Solutions Centers. General and administrative expenses

increased by CHF 102 million to CHF 4,247 million and adjusted general and administrative expenses increased by CHF 198 million, mainly due to CHF 240 million higher net expenses for provisions for litigation, regulatory and similar matters, partly offset by lower marketing costs.

Depreciation and impairment of property, equipment and software increased to CHF 1,004 million from CHF 944 million, reflecting increased depreciation expenses related to internally generated capitalized software.

#### *Services to / from business divisions and other Corporate Center units*

Corporate Center – Services allocated expenses of CHF 8,281 million to the business divisions and other Corporate Center units compared with CHF 8,164 million. Adjusted net allocated expenses for services to business divisions and other Corporate Center units were CHF 7,346 million compared with CHF 7,080 million, mainly as the costs allocated to business divisions and other Corporate Center units in 2016 were lower than the actual costs incurred by Corporate Center – Services on their behalf. Since 2017, costs are allocated to the business divisions and other Corporate Center units based on actual costs incurred by Corporate Center – Services.

#### *Operating expenses after service allocations to / from business divisions and other Corporate Center units*

Corporate Center – Services retains costs related to Group governance and other corporate activities, certain strategic and regulatory projects and certain restructuring expenses. Total operating expenses remaining in Corporate Center – Services after allocations increased to CHF 762 million from CHF 747 million and to CHF 743 million from CHF 690 million on an adjusted basis, driven by the aforementioned higher net expenses for provisions for litigation, regulatory and similar matters, largely offset by lower retained expenses as the costs allocated to business divisions and other Corporate Center units in 2016 were lower than the actual costs incurred by Corporate Center – Services on their behalf.

## 2016 compared with 2015

Corporate Center – Services recorded a loss before tax of CHF 849 million compared with CHF 818 million, and CHF 912 million on an adjusted basis compared with CHF 1,056 million.

### Operating income

Operating income was negative CHF 102 million compared with positive CHF 241 million, mainly as gains on sales of real estate decreased to CHF 120 million from CHF 378 million. On an adjusted basis, operating income was negative CHF 222 million compared with negative CHF 137 million, mainly due to lower income from the investment of the Group's equity allocated from Corporate Center – Group Asset and Liability Management (Group ALM).

### Operating expenses

#### *Operating expenses before service allocations to business divisions and other Corporate Center units*

Before service allocations to business divisions and other Corporate Center units, total operating expenses decreased by CHF 363 million or 4% to CHF 8,911 million. Restructuring expenses were CHF 1,141 million compared with CHF 1,125 million and mainly related to our transitioning activities to nearshore and offshore locations, as well as outsourcing of IT and other services. Adjusted operating expenses before allocations decreased by CHF 381 million or 5% to CHF 7,770 million.

Personnel expenses decreased by CHF 102 million to CHF 3,801 million and by CHF 216 million to CHF 3,283 million on an adjusted basis. The decrease in adjusted personnel expenses was mainly a result of nearshoring and offshoring initiatives as well as lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions.

General and administrative expenses decreased by CHF 338 million to CHF 4,145 million and adjusted general and administrative expenses decreased by CHF 242 million, mainly due to lower expenses for outsourcing and decreased professional fees.

Depreciation and impairment of property, equipment and software increased to CHF 944 million from CHF 868 million, reflecting increased depreciation expenses related to internally generated capitalized software.

#### *Services to / from business divisions and other Corporate Center units*

Corporate Center – Services allocated expenses of CHF 8,164 million to the business divisions and other Corporate Center units compared with CHF 8,215 million. Adjusted net allocated expenses for services to business divisions and other Corporate Center units were CHF 7,080 million compared with CHF 7,231 million.

#### *Operating expenses after service allocations to / from business divisions and other Corporate Center units*

Corporate Center – Services retains costs related to Group governance functions and other corporate activities, certain strategic and regulatory projects and certain restructuring expenses. Total operating expenses remaining in Corporate Center – Services after allocations decreased to CHF 747 million from CHF 1,059 million and to CHF 690 million from CHF 919 million on an adjusted basis, mainly reflecting lower retained expenses for regulatory projects, a reduction of CHF 13 million in expenses for provisions for litigation, regulatory and similar matters, and lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions.

## Corporate Center – Group Asset and Liability Management

### Corporate Center – Group ALM<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Results</b>				
Business division-aligned risk management net income	712	847	878	(16)
Capital investment and issuance net income	(119)	45	272	
Group structural risk management net income	(510)	(547)	(647)	(7)
<b>Total risk management net income before allocations</b>	<b>84</b>	<b>345</b>	<b>503</b>	<b>(76)</b>
Allocations to business divisions and other CC units	(264)	(512)	(832)	(48)
<i>of which: Wealth Management</i>	(256)	(389)	(471)	(34)
<i>of which: Wealth Management Americas</i>	(115)	(118)	(104)	(3)
<i>of which: Personal &amp; Corporate Banking</i>	(181)	(332)	(421)	(45)
<i>of which: Asset Management</i>	(18)	(7)	(15)	157
<i>of which: Investment Bank</i>	344	260	211	32
<i>of which: CC – Services</i>	(120)	(36)	(145)	233
<i>of which: CC – Non-core and Legacy Portfolio</i>	83	110	114	(25)
<b>Total risk management net income after allocations</b>	<b>(179)</b>	<b>(167)</b>	<b>(329)</b>	<b>7</b>
Accounting asymmetries related to economic hedges	(62)	27	(66)	
Hedge accounting ineffectiveness <sup>2</sup>	(12)	7	156	
Net foreign currency translation gain / (loss) <sup>3</sup>	(22)	(122)	88	
Net gain / (loss) related to the buyback of debt			(257)	
Own credit on financial liabilities designated at fair value			553	
Other	0	37	133	(100)
<b>Total operating income as reported</b>	<b>(276)</b>	<b>(219)</b>	<b>277</b>	<b>26</b>
<b>Total operating income (adjusted)<sup>4,5</sup></b>	<b>(254)</b>	<b>(97)</b>	<b>(107)</b>	<b>162</b>
Personnel expenses	34	31	30	10
General and administrative expenses	26	17	22	53
Depreciation and impairment of property, equipment and software	0	0	0	
Amortization and impairment of intangible assets	0	0	0	
Services (to) / from business divisions and other CC units	(13)	(49)	(57)	(73)
<b>Total operating expenses as reported</b>	<b>47</b>	<b>(1)</b>	<b>(5)</b>	
<i>of which: personnel-related restructuring expenses</i>	1	0	0	
<i>of which: non-personnel-related restructuring expenses</i>	0	0	0	
<i>of which: restructuring expenses allocated from CC – Services</i>	3	0	0	
<b>Total operating expenses (adjusted)</b>	<b>43</b>	<b>(1)</b>	<b>(5)</b>	
<b>Operating profit / (loss) before tax as reported</b>	<b>(322)</b>	<b>(218)</b>	<b>282</b>	<b>48</b>
<b>Operating profit / (loss) before tax (adjusted)<sup>4</sup></b>	<b>(296)</b>	<b>(96)</b>	<b>(102)</b>	<b>208</b>
<b>Additional information</b>				
Average attributed equity (CHF billion) <sup>6</sup>	2.7	4.3	3.3	(37)
Total assets (CHF billion) <sup>7</sup>	245.7	267.2	237.5	(8)
Risk-weighted assets (CHF billion) <sup>8</sup>	11.2	10.6	6.0	6
<i>of which: held by CC – Group ALM on behalf of BDs and other CC units (CHF billion)<sup>8</sup></i>	3.9			
Leverage ratio denominator (CHF billion) <sup>8</sup>	249.9	272.4	247.9	(8)
<i>of which: held by CC – Group ALM on behalf of BDs and other CC units (CHF billion)<sup>8</sup></i>	124.4			
Personnel (full-time equivalents)	143	142	125	1

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Excludes ineffectiveness of hedges of net investments in foreign operations. <sup>3</sup> Related to the disposal of foreign subsidiaries and branches. <sup>4</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>5</sup> Adjusted total operating income excludes foreign currency translation gains or losses. <sup>6</sup> Refer to the "Capital management" section of this report for more information. <sup>7</sup> Based on third-party view, i.e., without intercompany balances. <sup>8</sup> Represents risk-weighted assets and leverage ratio denominator held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information.



## 2017 compared with 2016

Corporate Center – Group Asset and Liability Management (Group ALM) recorded a loss before tax of CHF 322 million compared with a loss of CHF 218 million. On an adjusted basis, the loss before tax was CHF 296 million compared with a loss of CHF 96 million, driven by lower net income on accounting asymmetries related to economic hedges and higher retained operating expenses.

### Operating income

Total operating income was negative CHF 276 million compared with negative CHF 219 million. Adjusted total operating income retained by Group ALM was negative CHF 254 million compared with negative CHF 97 million.

### Total risk management net income before allocations

Total risk management net income before allocations to business divisions and other Corporate Center units was CHF 84 million compared with CHF 345 million, mainly reflecting lower net income from business division-aligned risk management activities and negative net income from capital investment and issuance.

### Business division-aligned risk management net income

Net income from business division-aligned risk management activities was CHF 712 million compared with CHF 847 million, mainly reflecting reduced interest rate risk management revenues in the banking book for Wealth Management and Personal & Corporate Banking. This decrease was mainly due to lower interest income from managing euro- and Swiss franc-denominated deposits in the current negative interest rate environment.

### Capital investment and issuance net income

Net income from capital investment and issuance activities was negative CHF 119 million compared with positive CHF 45 million. This decrease was due to CHF 83 million higher net interest expenses as a result of an increase in total outstanding long-term debt that is eligible for total loss-absorbing capital and CHF 81 million lower interest income from the investment of the Group's equity due to maturing positions being replaced at lower long-term interest rates.

### Group structural risk management net income

Net income from Group structural risk management activities was negative CHF 510 million compared with negative CHF 547 million. An increase in income of CHF 132 million from the management of the Group's high-quality liquid assets (HQLA), mainly due to wider spreads between certain HQLA and internal funding liabilities, was largely offset by an increase in net interest expense of CHF 98 million due to issuances of long-term debt during 2017.

### Allocations to business divisions and other Corporate Center units

Combined allocations from risk management activities to business divisions and other Corporate Center units were CHF 264 million compared with CHF 512 million. This decrease primarily reflects the aforementioned lower net income from capital investment and issuance activities, which is fully allocated to the business divisions and other Corporate Center units in proportion to their attributed equity, and lower net income from business division-aligned risk management activities, which is allocated to business divisions, predominantly Wealth Management and Personal & Corporate Banking.

### Total risk management net income after allocations

Group ALM retained negative CHF 179 million from its risk management activities after allocations compared with negative CHF 167 million.

Retained income from risk management activities is entirely related to Group structural risk management and is mainly the net result of costs from buffers that are maintained by Group ALM at levels above the total consumption of the business divisions and the revenues generated by Group ALM from the management of the Group's HQLA portfolio relative to the benchmark rates used to allocate the costs.

#### *Accounting asymmetries related to economic hedges*

Net income retained by Group ALM due to accounting asymmetries related to economic hedges was negative CHF 62 million compared with positive CHF 27 million, primarily due to a loss of CHF 170 million compared with a loss of CHF 38 million on Group ALM's cross-currency and interest rate derivatives hedges related to its portfolio of internal funding as well as lower fair value gains of CHF 70 million compared with CHF 174 million on certain internal funding transactions due to the tightening of own credit funding spreads. This was partly offset by a gain of CHF 38 million compared with a loss of CHF 43 million related to HQLA classified as available for sale.

#### *Hedge accounting ineffectiveness*

Net income related to hedge accounting ineffectiveness was negative CHF 12 million compared with positive CHF 7 million. This ineffectiveness primarily arises from changes in the spread between LIBOR and the overnight index swap rate due to differences in the way these impact the valuation of the hedged items and hedging instruments through either the benchmark rate determining cash flows or the discount rate.

#### *Other*

Other net income was nil compared with CHF 37 million, mainly reflecting lower interest income retained by Group ALM on behalf of non-controlling interests.

#### *Operating expenses*

Total operating expenses were CHF 47 million compared with negative CHF 1 million. From June 2017, Group ALM retains costs related to Group structural risk management income to the extent that such income is not allocated to the business divisions and other Corporate Center units. Previously, Group ALM allocated all costs to business divisions and other Corporate Center units.

#### *Balance sheet assets*

Balance sheet assets decreased by CHF 21 billion to CHF 246 billion as of 31 December 2017, reflecting increased net funding consumption by the business divisions. Group ALM is responsible for investing any funding generated that is surplus to the requirements of the business divisions. As a result, Group ALM's balance sheet is mainly driven by the volume of liabilities created across the Group rather than centrally managed asset requirements.

→ **Refer to the "Treasury management" section of this report for more information**

#### *Risk-weighted assets*

Risk-weighted assets (RWA) were largely stable at CHF 11 billion as of 31 December 2017.

→ **Refer to the "Capital management" section of this report for more information**

#### *Leverage ratio denominator*

The leverage ratio denominator (LRD) decreased to CHF 250 billion from CHF 272 billion, consistent with the decrease in balance sheet assets.

→ **Refer to the "Capital management" section of this report for more information**

## 2016 compared with 2015

Corporate Center – Group Asset and Liability Management (Group ALM) recorded a loss before tax of CHF 218 million compared with a profit before tax of CHF 282 million. On an adjusted basis, the loss before tax was CHF 96 million compared with a loss of CHF 102 million, driven by lower negative net income after allocations, largely offset by lower gains on hedge accounting ineffectiveness.

### Transfer of Risk Exposure Management function

Consistent with changes in the manner in which operating segment performance is assessed, we transferred in 2016 the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM to further harmonize REM risk management responsibility with the reporting structure and align it more closely with other activities performed by Group ALM. REM primarily performs risk management over credit, debit and funding valuation adjustments for our over-the-counter (OTC) derivatives portfolio.

Prior-period profit and loss information has been restated to reflect this transfer. Net income from REM before allocations is now presented within the line “Business division-aligned risk management net income” and is fully allocated to the business divisions and other Corporate Center units. There was no effect on operating profit before tax for any segment for any period from this restatement.

Prior-period information for balance sheet assets and risk-weighted assets has not been restated as the effect would not have been material.

The LRD of Group ALM has been restated for 31 December 2015 and as a result increased by CHF 7.7 billion, with an equal and opposite decrease in Corporate Center – Non-core and Legacy Portfolio.

### Operating income

Total operating income was negative CHF 219 million compared with positive CHF 277 million. Adjusted total operating income retained by Group ALM was negative CHF 97 million compared with negative CHF 107 million.

### Business division-aligned risk management net income

Net income from business division-aligned risk management activities was CHF 847 million compared with CHF 878 million, mainly reflecting reduced interest rate risk management revenues in the banking book for Wealth Management and Personal & Corporate Banking. This decrease was mainly due to lower penalty fees received from clients from the early termination of loans and lower interest income from managing euro-denominated deposits in the current negative interest rate environment.

### Capital investment and issuance net income

Net income from capital investment and issuance activities was CHF 45 million compared with CHF 272 million. This decrease was due to CHF 168 million in higher net interest expenses as a result of an increase in total outstanding long-term debt that is eligible for total loss-absorbing capital, fees paid related to the issuance of additional tier 1 capital and senior unsecured debt during the year, and CHF 58 million lower interest income from the investment of the Group’s equity due to maturing positions being replaced at lower long-term interest rates.

### Group structural risk management net income

Net income from Group structural risk management activities was negative CHF 547 million compared with negative CHF 647 million. An increase in income of CHF 481 million from the management of the Group’s high-quality liquid assets (HQLA), mainly due to wider spreads between certain HQLA and internal funding liabilities, was largely offset by an increase in net interest expense of CHF 382 million due to issuances of long-term debt during 2016.

### Allocations to business divisions and other Corporate Center units

Combined allocations from risk management activities to business divisions and other Corporate Center units were CHF 512 million compared with CHF 832 million. This decrease primarily reflects the aforementioned lower net income from capital investment and issuance activities, which is fully allocated to the business divisions and other Corporate Center units in proportion to their attributed equity. In addition, cost allocations from Group structural risk management activities increased by CHF 62 million. This allocation is based on consumption of funding and liquidity risk by the business divisions and other Corporate Center units.

### Total risk management net income after allocations

Group ALM retained negative CHF 167 million from its risk management activities after allocations compared with negative CHF 329 million.

Retained income from risk management activities is entirely related to Group structural risk management and is mainly the net result of costs from buffers that are maintained by Group ALM at levels above the total consumption of the business divisions and the revenues generated by Group ALM from the management of the Group’s HQLA portfolio relative to the benchmark rates used to allocate the costs.

#### *Accounting asymmetries related to economic hedges*

Net income retained by Group ALM due to accounting asymmetries related to economic hedges was CHF 27 million compared with negative CHF 66 million, primarily due to a fair value gain of CHF 174 million on certain internal funding transactions due to the tightening of own credit funding spreads compared with a loss of CHF 19 million. This was partly offset by a loss of CHF 43 million related to HQLA classified as available for sale compared with a gain of CHF 102 million. The lower magnitude of this asymmetrical result reflects the change applied since the first quarter of 2016 to classify the majority of newly purchased HQLA debt securities as financial assets designated at fair value through profit or loss, instead of classifying them as financial assets available for sale.

#### *Hedge accounting ineffectiveness*

Net income related to hedge accounting ineffectiveness was CHF 7 million compared with CHF 156 million. The higher revenue in the prior year mainly related to our cash flow hedges following the Swiss National Bank's actions in January 2015. This ineffectiveness primarily arises from changes in the spread between LIBOR and the overnight index swap rate due to differences in the way these impact the valuation of the hedged items and hedging instruments through either the benchmark rate determining cash flows or the discount rate.

#### *Other*

Other net income was CHF 37 million compared with CHF 133 million, reflecting negative income related to own-bond market-making activity in the Investment Bank and lower interest income retained by Group ALM on behalf of non-controlling interests. Additionally, 2016 included a loss of CHF 12 million from the Group ALM-managed monthly conversion of non-Swiss franc profits compared with a gain of CHF 56 million in 2015.

#### *Balance sheet assets*

Balance sheet assets increased by CHF 30 billion to CHF 267 billion, mainly due to a CHF 23 billion net increase in financial assets designated at fair value, available for sale and held to maturity, as well as an CHF 18 billion increase in cash and balances with central banks that primarily occurred toward the end of the year. These increases mainly reflected liquidity requirements applicable to our US intermediate holding company and UBS Europe SE and also resulted from an increase in net funds transferred to Group ALM by the business divisions.

Group ALM is responsible for investing any funding generated that is surplus to the requirements of the business divisions. As a result, Group ALM's balance sheet is mainly driven by the volume of liabilities created across the Group rather than centrally managed asset requirements.

#### *Risk-weighted assets*

Fully applied risk-weighted assets (RWA) increased by CHF 5 billion to CHF 11 billion as of 31 December 2016, largely as a result of a revised methodology for the allocation of operational risk RWA to business divisions and Corporate Center units and an increase in credit risk in Group ALM's HQLA portfolios.

#### *Leverage ratio denominator*

The LRD increased to CHF 272 billion from CHF 248 billion, consistent with the increase in balance sheet assets.

# Corporate Center – Non-core and Legacy Portfolio

## Corporate Center – Non-core and Legacy Portfolio<sup>1</sup>

CHF million, except where indicated	As of or for the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Results</b>				
Income	(11)	(23)	(195)	(52)
Credit loss (expense) / recovery	(11)	(13)	(8)	(15)
<b>Total operating income</b>	<b>(22)</b>	<b>(36)</b>	<b>(203)</b>	<b>(39)</b>
Personnel expenses	43	66	116	(35)
General and administrative expenses	114	732	806	(84)
Services (to) / from business divisions and other CC units	224	280	379	(20)
<i>of which: services from CC – Services</i>	<i>194</i>	<i>225</i>	<i>313</i>	<i>(14)</i>
Depreciation and impairment of property, equipment and software	0	0	0	
Amortization and impairment of intangible assets	0	0	0	
<b>Total operating expenses</b>	<b>381</b>	<b>1,078</b>	<b>1,301</b>	<b>(65)</b>
<b>Operating profit / (loss) before tax</b>	<b>(403)</b>	<b>(1,114)</b>	<b>(1,503)</b>	<b>(64)</b>
<b>Adjusted results<sup>2</sup></b>				
<b>Total operating income as reported</b>	<b>(22)</b>	<b>(36)</b>	<b>(203)</b>	<b>(39)</b>
<b>Total operating income (adjusted)</b>	<b>(22)</b>	<b>(36)</b>	<b>(203)</b>	<b>(39)</b>
<b>Total operating expenses as reported</b>	<b>381</b>	<b>1,078</b>	<b>1,301</b>	<b>(65)</b>
<i>of which: personnel-related restructuring expenses</i>	<i>0</i>	<i>1</i>	<i>14</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>0</i>	<i>0</i>	<i>0</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>6</i>	<i>21</i>	<i>43</i>	
<b>Total operating expenses (adjusted)</b>	<b>375</b>	<b>1,057</b>	<b>1,245</b>	<b>(65)</b>
<b>Operating profit / (loss) before tax as reported</b>	<b>(403)</b>	<b>(1,114)</b>	<b>(1,503)</b>	<b>(64)</b>
<b>Operating profit / (loss) before tax (adjusted)</b>	<b>(397)</b>	<b>(1,093)</b>	<b>(1,447)</b>	<b>(64)</b>
<b>Additional information</b>				
Average attributed equity (CHF billion) <sup>3</sup>	1.3	2.1	2.9	(38)
Total assets (CHF billion) <sup>4</sup>	46.2	68.5	94.4	(33)
Risk-weighted assets (CHF billion) <sup>3</sup>	16.1	18.9	30.7	(15)
<i>of which: held by CC – Non-core and Legacy Portfolio (CHF billion)</i>	<i>16.1</i>	<i>18.9</i>	<i>30.7</i>	<i>(15)</i>
Leverage ratio denominator (CHF billion) <sup>3</sup>	16.6	22.4	38.5	(26)
<i>of which: held by CC – Non-core and Legacy Portfolio (CHF billion)</i>	<i>14.9</i>	<i>22.4</i>	<i>38.5</i>	<i>(33)</i>
<i>of which: held by CC – Group ALM on behalf of CC – Non-core and Legacy Portfolio (CHF billion)<sup>5</sup></i>	<i>1.7</i>			
Personnel (full-time equivalents)	52	63	77	(17)

<sup>1</sup> Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. <sup>2</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. <sup>3</sup> Refer to the "Capital management" section of this report for more information. <sup>4</sup> Based on third-party view, i.e., without intercompany balances. <sup>5</sup> Represents leverage ratio denominator held by Corporate Center – Group ALM that is directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, this resource is allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in the "Capital management" section of this report for more information.

## 2017 compared with 2016

Corporate Center – Non-core and Legacy Portfolio recorded a loss before tax of CHF 403 million compared with CHF 1,114 million.

### Operating income

Operating income was negative CHF 22 million compared with negative CHF 36 million. The improved result was mainly due to income related to a claim on a defaulted counterparty position, largely allocated from Corporate Center – Group Asset and Liability Management (Group ALM), and lower losses from novation and unwind activities.

### Operating expenses

Total operating expenses decreased by CHF 697 million or 65% to CHF 381 million. 2017 included CHF 51 million net expenses for provisions for litigation, regulatory and similar matters compared with CHF 584 million. Net expenses for services from business divisions and other Corporate Center units decreased by CHF 56 million as a result of reduced consumption of shared services. Furthermore, professional fees declined by CHF 42 million and personnel expenses decreased by CHF 23 million due to lower staff levels.

In addition, 2017 reflected a net credit for the UK bank levy of CHF 11 million compared with a net expense of CHF 31 million, primarily as 2017 included a CHF 22 million credit related to prior years.

### Balance sheet assets

During 2017, total assets decreased by CHF 22 billion to CHF 46 billion, mainly due to a CHF 19 billion reduction in positive replacement values (PRVs), primarily reflecting trade terminations and maturities, mainly related to interest rate and foreign exchange contracts.

Total assets excluding PRVs decreased by CHF 4 billion to CHF 8 billion, mainly due to a reduction in cash collateral receivables on derivative instruments.

Assets classified as Level 3 in the fair value hierarchy totaled CHF 1.6 billion as of 31 December 2017.

### Risk-weighted assets

Risk-weighted assets (RWA) decreased by CHF 3 billion to CHF 16 billion.

→ **Refer to the “Capital management” section of this report for more information**

### Leverage ratio denominator

The leverage ratio denominator (LRD) decreased to CHF 15 billion from CHF 22 billion, consistent with the reduction in balance sheet assets.

→ **Refer to the “Capital management” section of this report for more information**

## Composition of Non-core and Legacy Portfolio

An overview of the composition of Non-core and Legacy Portfolio is presented in the table below.

The groupings of positions by category and the order in which these are listed are not necessarily representative of the

magnitude of the risks associated with them, nor do the metrics shown in the table necessarily represent the risk measures used to manage and control these positions.

Exposure category	Description	RWA		Total assets <sup>1</sup>		LRD <sup>2</sup>	
		31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Rates (linear)</b>	Consists of linear OTC products (primarily vanilla interest rate, inflation, basis and cross-currency swaps for all major currencies and some emerging markets) and non-linear OTC products (vanilla and structured options). More than 85% of gross PRVs are collateralized and more than 95% of uncollateralized exposures are rated investment grade. More than 60% of gross PRVs are due to mature by the end of 2021.	<b>1.3</b>	2.5	<b>28.6</b>	42.6	<b>6.2</b>	9.4
<b>Rates (non-linear)</b>		<b>0.2</b>	0.8	<b>8.4</b>	14.5	<b>1.2</b>	2.0
<b>Credit</b>	Consists primarily of a residual structured credit book that is largely hedged against market risk and is expected to materially run off by the end of 2018. The remaining counterparty risk is fully collateralized and diversified across multiple names. Also includes corporate lending and residual distressed credit positions, with a similar expected run-off profile.	<b>0.3</b>	0.5	<b>0.7</b>	1.0	<b>0.9</b>	2.2
<b>Securitizations</b>	Consists primarily of a portfolio of CDS positions referencing ABS assets with related cash and synthetic hedges to mitigate the impact of directional movements. The majority of the remaining positions are expected to settle by 2020.	<b>1.9</b>	2.4	<b>0.9</b>	1.4	<b>0.8</b>	1.4
<b>Auction preferred stocks (APSS) and auction rate securities (ARSs)</b>	Portfolio of long-dated APSSs and municipal ARSs. All APSSs were rated A or above and all ARS exposures were rated Ba1 or above as of 31 December 2017.	<b>0.6</b>	0.7	<b>2.1</b>	2.5	<b>2.1</b>	2.5
<b>Municipal swaps and options</b>	Swaps and options with US state and local governments. More than 99% of the PRVs are with counterparties that were rated investment grade as of 31 December 2017.	<b>0.5</b>	0.4	<b>2.1</b>	2.3	<b>1.5</b>	1.7
<b>Other</b>	Diverse portfolio of smaller positions.	<b>1.0</b>	1.5	<b>3.4</b>	4.2	<b>2.2</b>	3.2
<b>Operational risk</b>	Operational risk RWA allocated to Non-core and Legacy Portfolio.	<b>10.3</b>	10.1				
<b>Total</b>		<b>16.1</b>	18.9	<b>46.2</b>	68.5	<b>14.9</b>	22.4

<sup>1</sup> Total assets of CHF 46.2 billion as of 31 December 2017 (CHF 68.5 billion as of 31 December 2016) include positive replacement values (gross exposure excluding the impact of any counterparty netting) of CHF 38.0 billion (CHF 56.5 billion as of 31 December 2016). <sup>2</sup> Swiss SRB leverage ratio denominator.

## 2016 compared with 2015

Corporate Center – Non-core and Legacy Portfolio recorded a loss before tax of CHF 1,114 million compared with CHF 1,503 million.

### Operating income

Operating income was negative CHF 36 million compared with negative CHF 203 million. The improved result was mainly due to lower losses from novation and unwind activities. Furthermore, 2016 included a gain related to the settlement of a litigation claim and valuation gains on financial assets designated at fair value compared with valuation losses in 2015.

### Operating expenses

Total operating expenses decreased by CHF 223 million or 17% to CHF 1,078 million. Net expenses for services from business divisions and other Corporate Center units decreased by CHF 99 million as a result of reduced consumption of shared services. Personnel expenses decreased by CHF 50 million, driven by a decrease in staff levels. Net expenses for provisions for litigation, regulatory and similar matters declined by CHF 36 million to CHF 584 million. Moreover, 2016 included an expense of CHF 33 million for the annual UK bank levy compared with CHF 50 million in 2015.

### Balance sheet assets

During 2016, balance sheet assets decreased to CHF 68 billion from CHF 94 billion. Positive replacement values (PRVs) decreased by CHF 22 billion, primarily reflecting ongoing reduction activity including negotiated bilateral settlements, third-party novations, including transfers to central clearing houses, and agreements to net down trades with other dealer counterparties, partly offset by fair value increases resulting from increases in interest rates. Total assets excluding PRVs decreased by CHF 4 billion to CHF 12 billion, mainly due to a reduction in cash collateral receivables on derivative instruments.

Assets classified as Level 3 in the fair value hierarchy totaled CHF 2.0 billion as of 31 December 2016.

### Risk-weighted assets

Fully applied RWA decreased by CHF 12 billion to CHF 19 billion, largely as a result of a revised methodology for the allocation of operational risk RWA to business divisions and Corporate Center units.

### Leverage ratio denominator

The fully applied LRD decreased to CHF 22 billion from CHF 38 billion, consistent with the reduction in balance sheet assets.



# Risk, treasury and capital management

Management report

## Audited information according to IFRS 7 and IAS 1

Risk and capital disclosures provided in line with the requirements of International Financial Reporting Standard 7 (IFRS 7), *Financial Instruments: Disclosures* and International Accounting Standard 1 (IAS 1), *Presentation of Financial Statements* form part of the financial statements included in the "Consolidated financial statements" section of this report and audited by the independent registered public accounting firm Ernst & Young Ltd, Basel. This information is marked as "Audited" within this section of the report. The risk profile of UBS AG consolidated does not differ materially from that of UBS Group AG consolidated. Audited information provided in the "Risk management and control" and "Treasury management" sections applies to both UBS Group AG consolidated and UBS AG consolidated.

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# Risk management and control

## Overview of risks arising from our business activities

The scale of our business activities is dependent on the capital we have available to cover the risks in our business, the size of our on- and off-balance sheet assets through their contribution to our capital, leverage and liquidity ratios, and our risk appetite.

Our overall credit risk profile remained stable over the year and we continued to manage market risks at generally low levels. Operational risk remains a focus.

The table on the next page shows risk-weighted assets (RWA), the leverage ratio denominator (LRD) and risk-based capital (RBC), as well as attributed tangible equity, total assets and operating profit before tax on both a reported and adjusted basis, for our business divisions and Corporate Center units. This

illustrates how the activities in our business divisions and Corporate Center units are captured in the risk measures mentioned above the table, and it illustrates their financial performance in the context of these measures.

- **Refer to the “Capital management” section of this report for more information on risk-weighted assets, leverage ratio denominator and our equity attribution framework**
- **Refer to “Statistical measures” in this section for more information on risk-based capital**
- **Refer to the “Performance by business division and Corporate Center unit – reported and adjusted” table in the “Group performance” section of this report for more information**

## Key risks, risk measures and performance by business division and Corporate Center unit

Business divisions and Corporate Center units	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio
<b>Key risks arising from business activities</b>	<b>Credit risk</b> from lending against securities collateral and mortgages, and a small amount of derivatives trading activity. Minimal contribution to market risk	<b>Credit risk</b> from lending against securities collateral and mortgages <b>Market risk</b> from municipal securities and taxable fixed income securities	<b>Credit risk</b> from retail business, mortgages, secured and unsecured corporate lending, and a small amount of derivatives trading activity. Minimal contribution to market risk	Small amounts of credit and market risk	<b>Credit risk</b> from lending (including temporary loan underwriting activities), derivatives trading and securities financing <b>Market risk</b> from primary underwriting activities and secondary trading is materially hedged	No material risk exposures	<b>Credit and market risk</b> arising from management of the Group's balance sheet, capital, profit or loss and liquidity portfolios. Market risk is materially hedged  Central management of <b>liquidity, funding, counterparty credit and structural FX risk</b>	<b>Credit risk</b> from remaining lending and derivative exposures  <b>Market risk</b> is materially hedged

**Operational risk** is an inevitable consequence of being in business, as losses can result from inadequate or failed internal processes, people and systems, or from external events. It can arise as a result of our past and current business activities across all business divisions and Corporate Center units.

## Risk measures and performance

	31.12.17								
	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
<i>CHF billion, as of or for the year ended</i>									
Risk-weighted assets (fully applied) <sup>1</sup>	29.0	25.5	48.0	3.9	74.5	29.2	11.2	16.1	237.5
<i>of which: credit and counterparty credit risk</i>	15.4	10.4	44.0	1.5	42.9	1.8	8.0	4.5	128.4
<i>of which: market risk</i>	0.0	1.6	0.0	0.0	11.7	(3.1) <sup>2</sup>	0.7	1.3	12.3
<i>of which: operational risk</i>	13.5	13.5	4.0	2.4	19.8	13.3	2.5	10.3	79.4
Leverage ratio denominator (fully applied) <sup>1</sup>	128.0	71.8	148.0	2.7	264.1	6.7	249.9	14.9	886.1
Risk-based capital <sup>3</sup>	3.0	1.8	3.2	0.4	6.8	11.0	5.7	2.0	33.9
Average attributed tangible equity <sup>4</sup>	4.8	3.0	6.1	0.3	9.3	18.9	2.7	1.3	46.4
Total assets	123.0	67.1	135.6	14.3	262.9	20.9	245.7	46.2	915.6
Operating profit / (loss) before tax (as reported)	2.3	1.2	1.6	0.6	1.2	(0.9)	(0.3)	(0.4)	5.3
Operating profit / (loss) before tax (adjusted) <sup>5</sup>	2.8	1.3	1.7	0.5	1.5	(0.9)	(0.3)	(0.4)	6.2

	31.12.16								
	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
<i>CHF billion, as of or for the year ended</i>									
Risk-weighted assets (fully applied) <sup>1</sup>	25.8	23.8	41.6	3.9	70.4	27.6	10.6	18.9	222.7
<i>of which: credit and counterparty credit risk</i>	12.5	9.1	37.7	1.6	37.0	1.4	7.3	6.2	112.8
<i>of which: market risk</i>	0.0	1.4	0.0	0.0	14.0	(3.2) <sup>2</sup>	0.7	2.6	15.5
<i>of which: operational risk</i>	13.2	13.2	3.9	2.3	19.5	13.1	2.5	10.1	77.8
Leverage ratio denominator (fully applied) <sup>1</sup>	115.5	68.1	152.2	2.7	231.2	5.8	272.4	22.4	870.5
Risk-based capital <sup>3</sup>	1.5	1.3	2.7	0.3	7.8	12.7	5.2	2.4	33.9
Average attributed tangible equity <sup>4</sup>	2.8	1.9	4.1	0.2	7.6	19.2	4.3	2.1	42.2
Total assets	115.5	65.9	139.9	12.0	242.3	23.7	267.2	68.5	935.0
Operating profit / (loss) before tax (as reported)	1.9	1.1	1.8	0.5	1.0	(0.8)	(0.2)	(1.1)	4.1
Operating profit / (loss) before tax (adjusted) <sup>5</sup>	2.4	1.2	1.8	0.6	1.5	(0.9)	(0.1)	(1.1)	5.3

<sup>1</sup> Represents RWA and LRD prior to allocation of RWA and LRD held by Corporate Center – Group ALM that is directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. Calculated in accordance with Swiss systemically relevant banks rules. Refer to the "Capital management" section of this report for more information. <sup>2</sup> Corporate Center – Services market risk RWA were negative, as they included the effect of portfolio diversification across businesses. <sup>3</sup> Refer to "Statistical measures" in this section for more information on risk-based capital. <sup>4</sup> Refer to the "Capital management" section of this report for more information on our equity attribution framework. <sup>5</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations. Refer to the "Performance by business division and Corporate Center unit – reported and adjusted" table in the "Group performance" section of this report for more information.

# Risk categories

We categorize the risk exposures of our business divisions and Corporate Center units as outlined in the table below.

## Risk definitions

	Risk managed by	Independent oversight by	Captured in our risk appetite framework
<b>Primary risks: the risks that our businesses may take to generate a return</b>			
<p><b>Audited   Credit risk:</b> the risk of loss resulting from the failure of a client or counterparty to meet its contractual obligations toward UBS. This includes settlement risk and loan underwriting risk:</p> <p><i>Settlement risk:</i> the risk of loss resulting from transactions that involve exchange of value (e.g., security versus cash) where we must deliver without first being able to determine with certainty that we will receive the countervalue</p> <p><i>Loan underwriting risk:</i> the risk of loss arising during the holding period of financing transactions that are intended for further distribution ▲</p>	Business management	Risk Control	●
<p><b>Audited   Market risk (traded and non-traded):</b> the risk of loss resulting from adverse movements in market variables. Market variables include observable variables, such as interest rates, foreign exchange rates, equity prices, credit spreads and commodity (including precious metal) prices, and variables that may be unobservable or only indirectly observable, such as volatilities and correlations. Market risk includes issuer risk and investment risk:</p> <p><i>Issuer risk:</i> the risk of loss from changes in fair value resulting from credit-related events affecting an issuer to which we are exposed through tradable securities or derivatives referencing the issuer</p> <p><i>Investment risk:</i> issuer risk associated with positions held as financial investments ▲</p>	Business management CC – Group ALM	Risk Control	●
<p><b>Country risk:</b> the risk of losses resulting from country-specific events. It includes transfer risk, whereby a country's authorities prevent or restrict the payment of an obligation, as well as systemic risk events arising from country-specific political or macroeconomic developments</p>	Business management	Risk Control	●
<b>Consequential risks: the risks to which our businesses are exposed as a consequence of being in business</b>			
<p><b>Audited   Liquidity risk:</b> the risk of being unable to generate sufficient funds from assets to meet payment obligations when they fall due, including in times of stress ▲</p>	Group Treasury	Risk Control	●
<p><b>Audited   Funding risk:</b> the risk of higher-than-expected funding costs due to wider-than-expected UBS credit spreads when existing funding positions mature and need to be rolled over or replaced by other, more expensive funding sources. If a shortage of available funding sources is expected in a stress event, funding risk also covers potential additional losses from forced asset sales ▲</p>			
<p><b>Structural foreign exchange risk:</b> the risk of decreases in our capital due to changes in foreign exchange rates with an adverse translation effect on capital held in currencies other than Swiss francs</p>	CC – Group ALM	Risk Control	●
<p><b>Operational risk:</b> the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events, including cyber risk. Operational risk includes, among other things, legal risk, conduct risk and compliance risk:</p> <p><i>Legal risk:</i> (i) the financial risk resulting from the non-enforceability of a contract or the failure to assert non-contractual rights, or (ii) the financial or reputational risk resulting from UBS being held liable for a contractual or legal claim, or otherwise being subject to a penalty or liability in a legal action, based on a contractual or other legal claim, violation of law, or regulation, or infringement of intellectual property rights, or failing to manage litigation or other actions appropriately or effectively</p> <p><i>Conduct risk:</i> the risk that the conduct of the firm or its individuals unfairly impacts clients or counterparties, undermines the integrity of the financial system or impairs effective competition to the detriment of consumers</p> <p><i>Compliance risk:</i> the financial or reputational risk incurred by us by not adhering to the applicable laws, rules and regulations, local and international best practice (including ethical standards) and our own internal standards</p> <p><i>Cyber risk:</i> the risk of a material impact from an external or internal attack on our information systems with the purpose of data theft, fraud or denial of service. Cyberattacks are manifestations of a cyber threat into an act of aggression or criminal activity causing financial, regulatory or reputational harm or loss</p> <p><i>Money laundering risk:</i> the risk that UBS fails to detect money laundering activities to prevent the financing of illegal activities (including terrorism) and fails to report suspicious activities or respond to anti-money laundering requests from relevant authorities</p>	Business management	Risk Control  Legal  Risk Control	●
<p><b>Pension risk:</b> the risk of a negative impact on our capital as a result of deteriorating funded status from decreases in the fair value of assets held in the defined benefit pension funds and/or changes in the value of defined benefit pension obligations due to changes in actuarial assumptions (e.g., discount rate, life expectancy, rate of pension increase) and/or changes to plan designs</p>	Human Resources	Risk Control and Finance	●
<p><b>Environmental and social risk:</b> the possibility of us suffering reputational or financial harm from transactions, products, services or activities that involve a party associated with environmentally or socially sensitive activities</p> <p>→ Refer to the "UBS and Society" section of this report for more information</p>	Business management	Risk Control	
<b>Business risks: the risks arising from the commercial, strategic and economic environment in which our businesses operate</b>			
<p><b>Business risks:</b> the potential negative impact on earnings from lower-than-expected business volumes and/or margins, to the extent they are not offset by a decrease in expenses</p>	Business management	Finance	●
<b>Reputational risks</b>			
<p><b>Reputational risk:</b> the risk of damage to our reputation from the point of view of our stakeholders, such as clients, shareholders, staff and the general public</p>	All businesses and functions	All control functions	

## Top and emerging risks

The top and emerging risks disclosed below reflect those that we currently think have the potential to materialize within one year and that could significantly affect the Group. Investors should also carefully consider all information set out in the "Risk factors" section of this report, where we discuss these and other material risks we currently consider could impact our ability to execute our strategy and may affect our business activities, financial condition, results of operations and prospects.

- We are exposed to a number of macroeconomic issues as well as general market conditions. As noted in "Market conditions and fluctuations may have a detrimental effect on our profitability, capital strength, liquidity and funding position" and "Performance in the financial services industry is affected by market conditions and the macroeconomic climate" in the "Risk factors" section of this report, these external pressures may have a significant adverse effect on our business activities and related financial results, primarily through reduced margins and revenues, asset impairments and other valuation adjustments. Accordingly, these macroeconomic factors are considered in the development of stress testing scenarios for our ongoing risk management activities.
- We are exposed to substantial changes in the regulation of our businesses that could have a material adverse effect on our business, as discussed in the "Regulatory and legal developments" section of this report and in "Substantial changes in the regulation of our businesses may adversely affect our business and our ability to execute our strategic plans" in the "Risk factors" section of this report.
- As a global financial services firm we are subject to many different legal, tax and regulatory regimes and extensive regulatory oversight. We are exposed to significant liability risk and we are subject to various claims, disputes, legal proceedings and government investigations, as noted in "Material legal and regulatory risks arise in the conduct of our business" in the "Risk factors" section of this report. Information on litigation, regulatory and similar matters we currently consider significant is disclosed in "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report.
- One of the most critical risks facing the broader industry is the threat of cyberattacks, which continue to evolve and become more powerful. Along with the rest of the industry, we face ongoing threats, such as data theft, disruption of service and cyber fraud, all of which have the potential to significantly impact our business. Additionally, due to the operational complexity of all our businesses, we are continually exposed to operational risks such as process error, failed execution, system failures and fraud. Conduct risks are inherent in our businesses. Moreover, financial crime, including money laundering, terrorist financing, sanctions violation, fraud, bribery and corruption, continues to present risks, as emerging technologies and changing geopolitical risks increase complexity, and continued heightened regulatory attention and expectations result in increased overall risk. Refer to "Operational risk" in this section and "Operational risks affect our business" in the "Risk factors" section of this report for more information.
- Our reputation is critical to achieving our strategic goals and performance targets, and damage to it can have fundamental negative effects on our business and prospects, as described in "Our reputation is critical to the success of our business" in the "Risk factors" section of this report.

# Risk governance

Our risk governance framework operates along three lines of defense. Our first line of defense, business management, owns its risk exposures and is required to maintain effective processes and systems to manage its risks, including robust and comprehensive internal controls and documented procedures. Business management has appropriate supervisory controls and review processes in place designed to identify control weaknesses and inadequate processes.

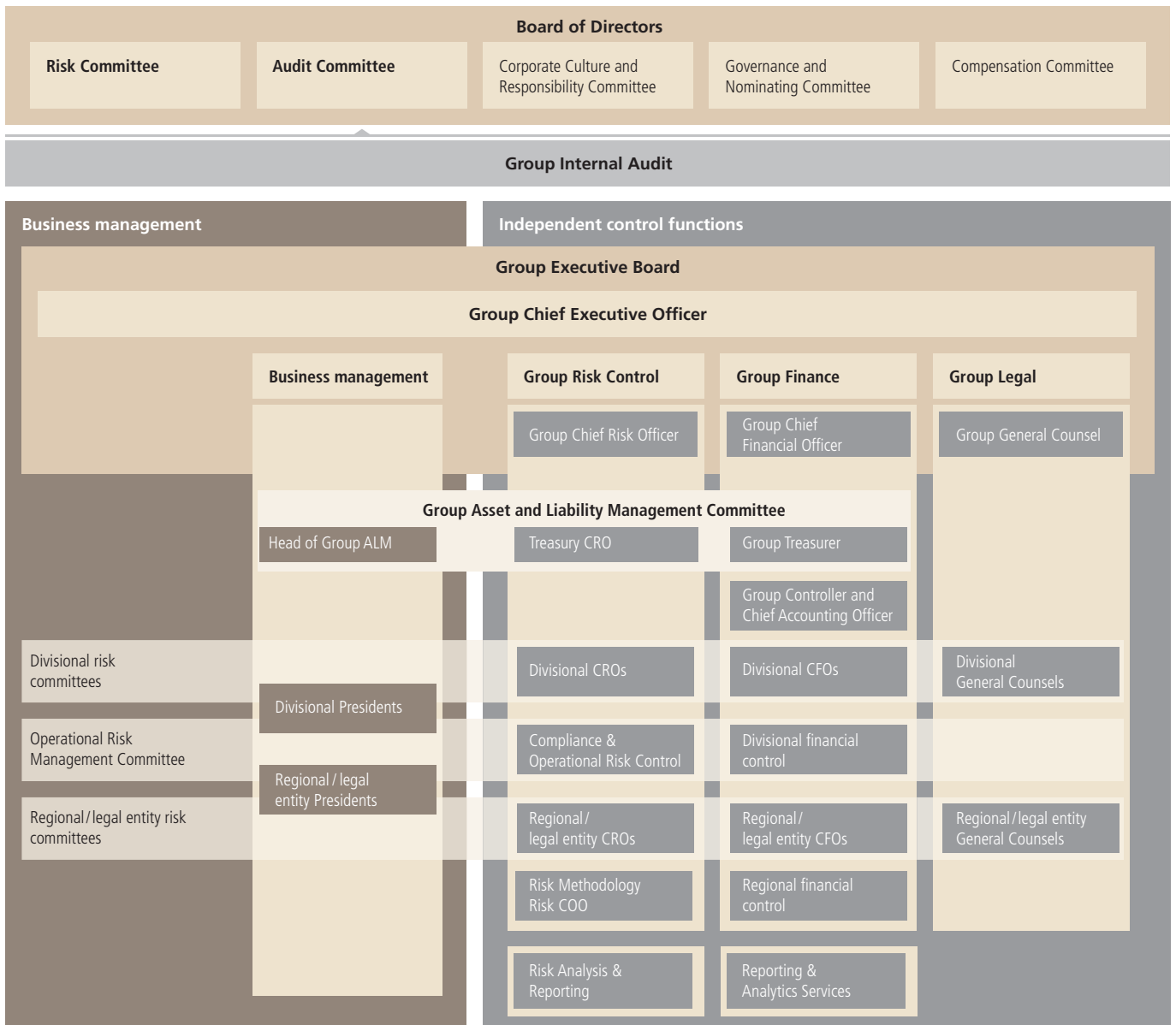
Our second line of defense is formed by the control functions, which are independent from the business and report directly to the Group CEO. Control functions provide independent

oversight of risks, including setting risk limits and protecting against non-compliance with applicable laws and regulations.

Our third line of defense, Group Internal Audit (GIA), reports to the Audit Committee of the Board of Directors and evaluates the overall effectiveness of governance, risk management and the control environment, including the assessment of how the first and second lines of defense meet their objectives.

The key roles and responsibilities for risk management and control are illustrated in the following chart and described on the next pages.

## Audited | Risk governance



**Audited** | The *Board of Directors* (BoD) is responsible for determining the risk principles, risk appetite and major portfolio limits of the Group, including their allocation to the business divisions and Corporate Center units. The BoD is supported by the BoD Risk Committee, which monitors and oversees the Group's risk profile and the implementation of the risk framework as approved by the BoD, as well as assesses the Group's key risk measurement methodologies. The Corporate Culture and Responsibility Committee supports the BoD in fulfilling its duty to safeguard and advance the Group's reputation for responsible and sustainable conduct. It reviews and assesses stakeholder concerns and expectations pertaining to UBS's societal performance and corporate culture and recommends appropriate actions to the BoD.

The *Group Executive Board* (GEB) implements the risk framework, controls the Group's risk profile and approves key risk policies.

The *Group Chief Executive Officer* (Group CEO) is responsible for the Group's results, has risk authority over transactions, positions and exposures, and allocates portfolio limits approved by the BoD within the business divisions and Corporate Center units.

The *business division Presidents* are accountable for the results of their business divisions. This includes actively managing their risk exposures, and balancing profit potential, risk, balance sheet and capital usage. The *regional Presidents* facilitate the implementation of UBS's strategy in their region, and have the mandate to escalate activities and issues that may give rise to actual or potentially material regulatory or reputational concerns.

The *Group Chief Risk Officer* (Group CRO) is responsible for Risk Control. Risk Control independently oversees all primary risks and most consequential risks as outlined in "Risk categories" above. This includes establishing methodologies to measure and assess risk, setting risk limits, and developing and operating an appropriate risk control infrastructure. Risk Control is also the central function for model risk management, which includes the validation of models used in the firm. The risk control process is supported by a framework of policies and

authorities. *Business division* and *regional Chief Risk Officers* have delegated authority for their respective divisions and regions. Moreover, authorities are delegated to risk officers according to their expertise, experience and responsibilities.

The *Group Chief Financial Officer* (Group CFO) is responsible for assessing and facilitating transparency in the financial performance of the Group and business divisions, and for monitoring whether disclosure of our financial performance meets regulatory requirements and corporate governance standards. The Group CFO manages the Group's and divisional financial control functions, including financial accounting, controlling, forecasting, planning and reporting processes. Further responsibilities include managing UBS's tax affairs, as well as treasury and capital management, including the management of funding and liquidity risk and UBS's regulatory capital ratios.

The *Group General Counsel* (Group GC) manages the Group's legal affairs and is responsible for supporting the Group with effective and timely assessment of legal matters impacting the Group or its businesses and for providing the legal advice required by the Group. The Group GC is further responsible for the management and reporting of all litigation and other significant contentious matters, including all legal proceedings, that involve UBS.

*Group Internal Audit* (GIA) independently assesses the adherence to our strategy, the effectiveness of governance, risk management and control processes at Group, business division and regional levels, including compliance with legal, regulatory and statutory requirements, as well as with internal policies and contracts. The Head GIA reports to the Chairman of the BoD and, in addition, GIA has a functional reporting line to the Audit Committee.

The above roles and responsibilities are replicated for certain significant legal entities of the Group through the appointment of entity level Presidents, Chief Risk Officers, Chief Financial Officers and General Counsels. ▲



# Risk appetite framework

Our risk appetite is defined at the aggregate level and reflects the types of risk that we are willing to accept or intend to avoid. It is established via a complementary set of qualitative and quantitative risk appetite statements defined on a Group-wide level and is embedded throughout our business divisions and legal entities through Group, business division and legal entity policies, limits and authorities. These statements are a critical foundation to maintaining a robust risk culture throughout our organization. The "Risk appetite framework" chart below shows the key elements of this framework, which are described in more detail further below.

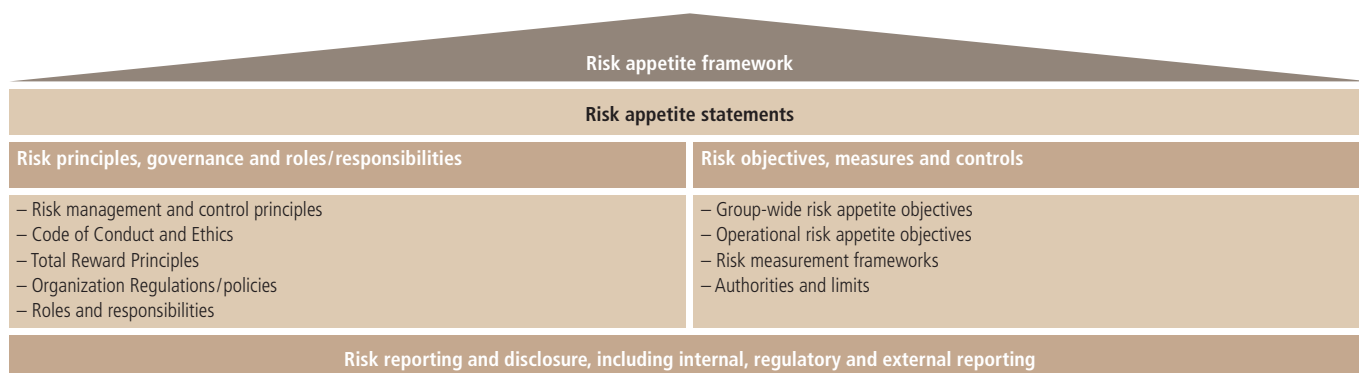
Qualitative statements aim to ensure we maintain the desired risk culture. Quantitative risk appetite objectives are designed to enhance the Group's resilience against the impact of potential severe adverse economic or geopolitical events. These risk appetite objectives cover the Group's minimum capital and leverage ratios, solvency, earnings, liquidity and funding, and are

subject to periodic review, including as part of the annual business planning process.

These objectives are complemented by operational risk appetite objectives, which are established for each of our operational risk categories, such as market conduct, theft, fraud, data confidentiality and technology risks. Operational risk events that exceed predetermined risk tolerances, expressed as percentages of the Group's operating income, must be escalated to the respective business division President or higher, as appropriate.

The quantitative risk appetite objectives are supported by a comprehensive suite of risk limits set at the portfolio level. These may apply across the Group, within a business division or business unit, at legal entity level, or to an asset class. These additional quantitative controls are typically bottom-up and are designed to monitor specific portfolios and to identify potential risk concentrations.

## Risk appetite framework



Risk reports aggregating measures of risk across products and businesses provide insight into the amounts, types, and sensitivities of the various risks in our portfolios and are intended to ensure compliance with defined limits. Risk officers, senior management and the BoD use this information to understand our risk profile and the performance of the portfolios.

The status of risk appetite objectives is evaluated each month and reported to the BoD and the GEB. Our risk appetite may change over time. Therefore, portfolio limits and associated approval authorities are subject to periodic reviews and changes, particularly in the context of our annual business planning process.

Our risk appetite framework is encompassed in a single overarching policy and conforms to the Financial Stability Board's Principles for an Effective Risk Appetite Framework published in 2013.

### Risk principles and risk culture

A strong risk culture is a prerequisite for success in today's highly complex operating environment. We are focused on maintaining a strong culture as a source of sustainable competitive advantage. By placing prudent and disciplined risk-taking at the center of every decision, we want to achieve our goals of delivering unrivaled client satisfaction, creating long-term value for stakeholders, and making UBS one of the most attractive companies to work for in the world.

Our risk appetite framework combines all the important elements of our risk culture, expressed in our Pillars, Principles and Behaviors, our risk management and control principles, our Code of Conduct and Ethics and our Total Reward Principles. Together, these aim to align the decisions we make with the Group’s strategy, principles and risk appetite. They help provide a solid foundation for promoting risk awareness, leading to appropriate risk-taking and the establishment of robust risk management and control processes. These principles are supported by a range of initiatives covering employees at all levels. This includes the UBS House View on Leadership, which is a set of explicit expectations for leaders that establishes consistent leadership standards across UBS. These initiatives also

include our principles of good supervision, which establish clear expectations of managers and employees with respect to supervisory responsibilities, specifically: to take responsibility, to organize their business, to know their employees and what they do, to know their business, to create a good compliance culture and to respond to and resolve issues.

- Refer to the “Our employees” section of this report for more information on our Pillars, Principles and Behaviors
- Refer to “Key principles and policies” in the “UBS and Society” section of this report and to the UBS Code of Conduct and Ethics at [www.ubs.com/code](http://www.ubs.com/code) for more information

### Risk management and control principles

Protection of financial strength	Protection of reputation	Business management accountability	Independent controls	Risk disclosure
Protecting UBS’s financial strength by controlling our risk exposure and avoiding potential risk concentrations at individual exposure levels, at specific portfolio levels and at an aggregate firm-wide level across all risk types	Protecting our reputation through a sound risk culture characterized by a holistic and integrated view of risk, performance and reward, and through full compliance with our standards and principles, particularly our Code of Conduct and Ethics	Maintaining management accountability, whereby business management, as opposed to Risk Control, owns all risks assumed throughout the Group and is responsible for the continuous and active management of all risk exposures to provide for balanced risk and return	Independent control functions that monitor the effectiveness of the businesses’ risk management and oversee risk-taking activities	Disclosure of risks to senior management, the BoD, investors, regulators, credit rating agencies and other stakeholders with an appropriate level of comprehensiveness and transparency

To maintain an environment where staff are comfortable raising concerns, we have whistleblowing policies and procedures in place. These offer multiple channels through which individuals may, either openly or anonymously, escalate suspected breaches of laws, regulations, rules and other legal requirements, our Code of Conduct and Ethics, policies, or relevant professional standards. Our program is designed to ensure that whistleblowing concerns are investigated and that appropriate and consistent action is taken. We are committed to ongoing awareness training and communication to all staff.

We also have a mandatory training program in place for all employees. The program covers a range of compliance and risk-related topics, including anti-money laundering and operational risk. In addition, specialized training is provided for employees depending on their specific roles and responsibilities, such as credit risk and market risk training for those working in trading areas. Failure to satisfactorily complete mandatory training sessions within the given deadline results in consequences, including disciplinary action. Our operational risk framework, incorporating the conduct risk framework, aims to identify and manage financial, regulatory, and reputational risks, together with risks to clients and to markets.

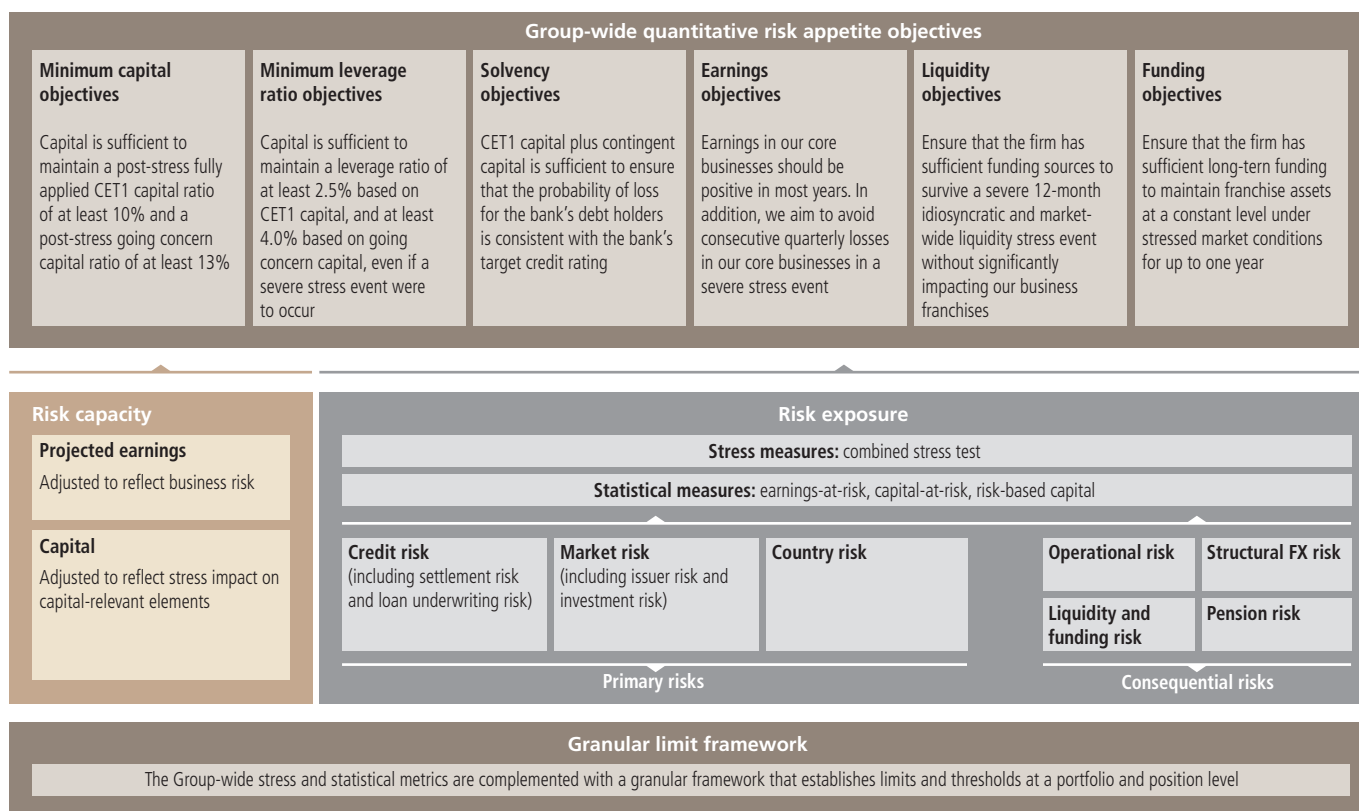
### Quantitative risk appetite objectives

Through a set of quantitative risk appetite objectives, we aim to ensure that our aggregate risk exposure remains within our desired risk capacity, based on our capital and business plans. The specific definition of risk capacity for each objective seeks to ensure that we have sufficient capital, earnings, funding and liquidity to protect our business franchises and exceed minimum regulatory requirements under a severe stress event. The risk appetite objectives are evaluated as part of the annual business planning process, and are approved by the BoD. The comparison of risk exposure with risk capacity is a key consideration in management decisions on potential adjustments to the business strategy and the risk profile of the Group.

We make use of both scenario-based stress tests and statistical risk measurement techniques to assess the impact of a severe stress event at a Group-wide level. These complementary frameworks capture exposures to all material primary and consequential risks as well as business risks across our business divisions and Corporate Center units.

- Refer to “Risk measurement” in this section for more information on our stress testing and statistical frameworks

## 2017 quantitative risk appetite objectives



In determining our risk capacity, we adjust projected earnings from the strategic plan for business risk to reflect lower expected earnings and lower expenses, such as the reversal of variable compensation accruals, in a severe stress event. We also adjust our capital to take into account the impact of stress on deferred tax assets, pension plan assets and liabilities, and accruals for capital returns to shareholders.

The chart on this page provides an overview of our quantitative risk appetite objectives during 2017. For 2018, we have decided to remove the going concern minimum capital and leverage ratio objectives as they would be satisfied when the corresponding CET1 objective is met, given the amount of additional tier 1 (AT1) instruments that have been issued. Our earnings objectives will consider the entire Group instead of only the core businesses going forward, and potential losses under a stress event are compared with historical earnings.

Risk appetite statements at the business division level are derived from the Group-wide objectives. They may also comprise objectives specific to the division, related to the specific activities and risks in that division. Risk appetite objectives are also set for certain legal entities. These must be consistent with the Group-wide risk appetite framework and approved in accordance with the regulations of the legal entity and the Group's regulations. Differences may exist that reflect the specific nature, size, complexity and regulations applicable to the relevant legal entity.

## Internal risk reporting

Comprehensive and transparent reporting of risks is central to the control and oversight responsibilities set out in our risk governance framework and is a requirement of our risk management and control principles. Accordingly, risks are reported at a frequency and to a level of detail commensurate with the extent and variability of the risk and the needs of the various governance bodies, regulators and risk authority holders.

On a monthly basis, the Group Risk Report provides a detailed qualitative and quantitative overview of developments in primary and consequential risks for the business divisions and Corporate Center units, along with aggregate views of risks at the Group-wide level, including the status of our risk appetite objectives and results of Group-wide stress testing. The Group Risk Report is distributed internally to the BoD Risk Committee and GEB, and to senior members of Group Risk Control, Group Internal Audit, Finance and Legal. Key extracts from the Group Risk Report, along with extracts from the monthly Group Finance Report and Group Treasury Report, are included in the monthly performance

update provided to the GEB and BoD. Granular divisional risk reports are provided to the respective business division Chief Risk Officers and the business division Presidents. This monthly reporting is supplemented with a suite of daily and weekly reports at various levels of granularity, covering market and credit risks for the business divisions and Corporate Center units, to enable risk officers and senior management to monitor and control the Group's risk profile.

Our internal risk reporting, which covers primary and consequential risks, is supported by risk data and measurement systems, which are also used for external disclosure and regulatory reporting. Dedicated units within Risk Control assume responsibility for measurement, analysis and reporting of risk and for overseeing the quality and integrity of risk-related data. Our risk data and measurement systems are subject to periodic review by Group Internal Audit following a risk-based audit approach.

## Risk measurement

**Audited I** We apply a variety of methodologies and measurements to quantify the risks of our portfolios and potential risk concentrations. Risks that are not fully reflected within standard measures are subject to additional controls, which may include preapproval of specific transactions and the application of specific restrictions. Models to quantify risk are generally developed by dedicated units within control functions and are subject to independent verification. ▲

Models and methodologies must be approved and are regularly reviewed in accordance with regulatory requirements as well as internal policies to test that models perform as expected, produce results comparable with actual events and values, and reflect best-in-practice approaches and recent academic developments. Our reviews assess whether models are performing satisfactorily, whether additional analysis is required and whether models need to be recalibrated or redeveloped. Results and conclusions are presented to the relevant governance body and, as required, to regulators.

The ongoing process of assessing model quality and performance in the production environment comprises two components: model verification, in which Model Risk Management & Control (MRMC) independently assesses a model's conceptual soundness, and model confirmation, the regular process of confirming the accuracy and appropriateness of the model output and its application, carried out by the model developers and reviewed by MRMC.

→ Refer to “Credit risk,” “Market risk” and “Operational risk” in this section for more information on model confirmation procedures

### Stress testing

We perform stress testing to estimate the loss that could result from extreme, yet plausible macroeconomic and geopolitical stress events. This enables us to identify, better understand and manage our potential vulnerabilities and risk concentrations. Stress testing plays a key role in our limits framework at Group-wide, business division, legal entity and portfolio levels. Stress test results are regularly reported to the BoD, the Risk Committee and the GEB. We also provide detailed stress loss analyses to FINMA and the regulators of our legal entities in accordance with their requirements. As described in “Risk appetite framework” above, stress testing, along with statistical loss measures, plays a central role in our risk appetite and business planning processes.

Our stress testing framework incorporates three pillars: (i) combined stress tests, (ii) a comprehensive range of portfolio- and risk type-specific stress tests and (iii) reverse stress testing.

Our *combined stress test (CST)* framework is scenario based and aims to quantify overall Group-wide losses that could result from a number of potential global systemic events. The framework captures all material primary and consequential risks, as well as business risks, as indicated in “Risk categories” above.

Scenarios are forward looking and encompass macroeconomic and geopolitical stress events calibrated to different levels of potential severity. We implement each scenario through the expected evolution of market indicators and economic variables under that scenario. We then assess the resulting effect on our primary, consequential and business risks to estimate the overall loss and capital implications were the scenario to occur. At least once a year, the Risk Committee approves the most relevant scenario, known as the binding scenario, to be used as the main scenario for regular CST reporting and for monitoring risk exposure against our minimum capital, earnings and leverage ratio objectives in our risk appetite framework. Results are reported to the Risk Committee, BoD, GEB and FINMA on a monthly basis.

The Enterprise-wide Stress Committee (ESC) is responsible for ensuring the consistency and adequacy of the assumptions and scenarios used for our Group-wide stress measures. As part of these responsibilities, the ESC seeks to ensure that the suite of stress scenarios adequately reflects current and potential developments in the macroeconomic and geopolitical environment, our current and planned business activities, and actual or potential risk concentrations and vulnerabilities in our portfolios. The ESC meets at least quarterly and is comprised of Group, business division and legal entity representatives of Risk Control. In executing its responsibilities, the ESC considers input from the Think Tank, a panel of senior representatives from the business divisions, Risk Control and economic research, which meets quarterly to review the current and possible future market environment in order to identify potential stress scenarios that could materially affect the Group's profitability. This results in a range of internal stress scenarios that are developed and evolve over time, separate from the scenarios mandated by FINMA.

Each scenario captures a wide range of macroeconomic variables. These include gross domestic product (GDP), equity prices, interest rates, foreign exchange rates, commodity prices, property prices and unemployment. We use assumed changes in these macroeconomic and market variables in each scenario to stress the key risk drivers of our portfolios. For example, lower GDP growth and rising interest rates may reduce the income of clients to whom we have lent money, which leads to changes in the credit risk parameters for probability of default, loss given default and exposure at default, and results in higher predicted credit losses within the stress scenario. We also capture the business risk resulting from lower fee, interest and trading income and lower expenses. These effects are measured across all material risk types and all businesses to calculate the aggregate estimated effect of the scenario on profit or loss, other comprehensive income, RWA, LRD and, ultimately, our capital and leverage ratios. The assumed changes in macroeconomic variables are updated periodically to take account of changes in the current and possible future market environment.

Through 2017, the binding scenario for CST was the internal *Global Deflation scenario*, which is characterized by: a crisis in the eurozone, with sovereign defaults in peripheral economies and the abandonment of the monetary union by Greece; a China hard landing, triggered by excessive policy tightening in light of market turbulence, including high real interest rates, insufficient fiscal stimulus, and stringent anti-corruption campaigns; an ineffective direct support of the equity market by governments; and a global recession, with central banks in major developed economies such as the eurozone, US and UK attempting to stimulate growth and restore market confidence by reducing policy rates further into negative territory.

The CST risk exposure was broadly stable over the year with most of the month-on-month variability arising primarily from temporary loan underwriting exposure in the Investment Bank.

As part of the CST framework, we routinely monitored four additional stress scenarios throughout 2017.

- *Failure of a Major Financial Institution scenario* represents renewed financial market turmoil due to the failure of a major global financial institution, leading to prolonged financial deleveraging and dramatically plunging activity around the globe.
- *US Monetary Crisis scenario* represents a loss of confidence in the US, which leads to international portfolio repositioning out of US dollar-denominated assets, sparking an abrupt and substantial US dollar sell-off. The US is pushed back into recession, other industrialized countries replicate this pattern and inflationary concerns lead to an overall higher interest rate level.
- *Global Depression scenario* represents a severe and prolonged eurozone crisis in which several peripheral countries default and exit the eurozone, and advanced economies are pulled into a prolonged period of economic stagnation.
- *Global Interest Rate Steepening scenario* represents a sudden shift in market sentiment causing a disorderly sell-off in long-dated bonds and a rapid steepening of the yield curve, exacerbated by a lack of liquidity in financial markets. This in turn triggers a sovereign crisis in Japan and a global recession.

We have developed a new *Severe Eurozone Crisis scenario* to be used as the binding stress scenario in our combined stress test framework for 2018. In line with the *Global Deflation scenario*, this retains a eurozone crisis at its core, but with greater severity through the inclusion of an additional sovereign debt restructuring as a consequence of the ensuing crisis. A China hard landing remains a feature of the scenario, while the assumption of more severe negative rates in major developed countries has been removed.

*Portfolio-specific stress tests* are measures that are tailored to the risks of specific portfolios. Our portfolio stress loss measures are derived from data on past events, but also include forward-looking elements. For example, we derive the expected market movements within our liquidity-adjusted stress metric using a combination of historical market behavior, based on an analysis of historical events, and forward-looking analysis including consideration of defined scenarios that have never occurred. Results of portfolio-specific stress tests may be subject to limits

to explicitly control risk-taking, or may be monitored without limits to identify vulnerabilities.

*Reverse stress testing* starts from a defined stress outcome (e.g., a specified loss amount, reputational damage, a liquidity shortfall or a breach of regulatory capital ratios) and works backward to identify the economic or financial scenarios that could result in such an outcome. As such, reverse stress testing is intended to complement scenario-based stress tests by assuming “what if” outcomes that could extend beyond the range normally considered, and thereby potentially challenge assumptions regarding severity and plausibility. The results of reverse stress testing are reported to relevant governance bodies according to the materiality and scope of the exercise.

Additionally, we routinely analyze the effect of increases or decreases in interest rates and changes in the structure of yield curves.

Moreover, Group Treasury performs stress testing to determine the optimum asset and liability structure that allows us to maintain an appropriately balanced liquidity and funding position under various scenarios. These scenarios differ from those outlined above, because they are focused on specific situations that could generate liquidity and funding stress, as opposed to the scenarios used in the CST framework, which focus on the impact on profit or loss and capital.

- Refer to “**Credit risk**” and “**Market risk**” in this section for more information on stress loss measures
- Refer to the “**Treasury management**” section of this report for more information on stress testing
- Refer to “**Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly**” in the “**Risk factors**” section of this report for more information

### Statistical measures

In addition to our scenario-based CST measure, we employ a statistical stress framework that allows us to calculate and aggregate risks using statistical techniques to derive stress events at chosen confidence levels.

We use this framework to derive a distribution of potential earnings based on historically observed market changes in combination with the firm’s actual risk exposures, considering effects on both income and expenses. From this, we determine earnings-at-risk (EaR), which measures the potential shortfall in earnings (i.e., the deviation from forecast earnings) at a 95% confidence level and is evaluated over a one-year horizon. EaR is used for the assessment of the earnings objectives in our risk appetite framework.

We extend the EaR measure by incorporating the effects of gains and losses recognized through other comprehensive income, to derive a distribution of potential effects of stress events on CET1 capital. From this distribution, we derive our capital-at-risk (CaR) buffer measure at a 95% confidence level for the assessment of our capital and leverage ratio risk appetite objectives, and we derive our CaR solvency measure at a 99.9% confidence level for the assessment of our solvency risk appetite objective.

We also use the CaR solvency measure as the basis to derive the contributions of business divisions and Corporate Center units to risk-based capital (RBC), which is a component of our equity attribution framework. RBC measures the potential capital impairment from an extreme stress event at a 99.9% confidence level to estimate the capital required to absorb unexpected loss while remaining able to fully repay creditors.

→ **Refer to the “Capital management” section of this report for more information on the equity attribution framework**

### Portfolio and position limits

The Group-wide stress and statistical metrics are complemented by more granular portfolio and position limits, triggers and targets. The combination of these measures provides a comprehensive, granular control framework that is applied to our business divisions and Corporate Center units, as well as the significant legal entities, as relevant to the key risks arising from their business models.

We apply limits to a variety of exposures at the portfolio level, using statistical and stress-based measures, such as value-at-risk, liquidity-adjusted stress, notional loan underwriting limits, economic value sensitivity and portfolio default simulations for our loan books. These are complemented with a set of controls for net interest income sensitivity, mark-to-market losses on available-for-sale portfolios, and the effect of foreign exchange movements on capital and capital ratios.

Portfolio measures are supplemented with position-level controls. Risk measures for position controls are based on market risk sensitivities and counterparty-level credit risk exposures. Market risk sensitivities include sensitivities to changes in general market risk factors, such as equity indices, foreign exchange rates and interest rates, and sensitivities to issuer-specific factors, such as changes in an issuer’s credit spread or default risk. We monitor a significant number of market risk controls for the Investment Bank and Corporate Center – Group Asset and Liability Management and Corporate Center – Non-core and Legacy Portfolio on a daily basis. Counterparty measures capture the current and potential future exposure to an individual counterparty, taking into account collateral and legally enforceable netting agreements.

→ **Refer to “Credit risk” in this section for more information on counterparty limits**

### Risk concentrations

**Audited I** A risk concentration exists where (i) a position is affected by changes in a group of correlated factors, or a group of positions are affected by changes in the same risk factor or a group of correlated factors, and (ii) the exposure could, in the event of large but plausible adverse developments, result in significant losses. The categories in which risk concentrations may occur include counterparties, industries, legal entities, countries or geographical regions, products and businesses.

The identification of risk concentrations requires judgment, as potential future developments cannot be accurately predicted and may vary from period to period. In determining whether we have a risk concentration, we consider a number of elements, both individually and collectively. These elements include the shared characteristics of the positions and our counterparties, the size of the position or group of positions, the sensitivity of the position or group of positions to changes in risk factors and the volatility and correlations of those factors. Also important in our assessment is the liquidity of the markets where the positions are traded, and the availability and effectiveness of hedges or other potential risk-mitigating factors. The value of a hedging instrument may not always move in line with the position being hedged, and this mismatch is referred to as basis risk.

Risk concentrations are subject to increased oversight by Risk Control and are assessed to determine whether they should be reduced or mitigated, depending on the available means to do so. It is possible that material losses could occur on asset classes, positions and hedges, particularly if the correlations that emerge in a stressed environment differ markedly from those envisaged by our risk models. ▲

- **Refer to “Credit risk” and “Market risk” in this section for more information on the compositions of our portfolios**
- **Refer to the “Risk factors” section of this report for more information**

## Credit risk

### Key developments

Overall, our gross credit risk exposures decreased by CHF 30 billion to CHF 518 billion during 2017. The increase in our gross loan portfolio of CHF 13 billion to CHF 319 billion, mainly driven by an increase in Wealth Management, was more than offset by exposure reductions in balances with central banks, loan commitments and over-the-counter derivatives.

Total net credit loss expense was CHF 128 million compared with CHF 37 million, mainly reflecting CHF 79 million higher expenses in the Investment Bank in the fourth quarter of 2017, primarily related to a margin loan to a single client following a significant decrease in the value of the collateral.

Our Swiss lending portfolios, which account for approximately half of our loan exposure, continued to perform well, although we remain watchful for any signs of deterioration in the Swiss economy that could impact our counterparties and lead to an increase in credit loss expenses from the low levels recently observed.

Volatility was remarkably low in 2017, amid a broad-based acceleration in global growth, strong corporate profits, predictable and still largely supportive monetary policy and expectations of US tax cuts. Tensions around Syria and North Korea, the fallout from natural disasters and political turmoil in the US contributed to intermittent periods of market volatility during the year, although overall the market reaction to geopolitical and other risk events has been largely muted.

In 2017, many counterparties in the energy segments adapted to operating in a lower oil price environment, hence price volatility during the year had very little impact on our portfolio.

Within the loan underwriting business, we continued to see a steady flow of transactions as leveraged loan markets remained relatively strong.

### Audited | Main sources of credit risk

- A substantial portion of our lending exposure arises from our Swiss domestic business, which offers corporate loans and mortgage loans mainly secured against residential properties and income-producing real estate, and therefore depends on the performance of the Swiss economy.
- Within the Investment Bank, our credit exposure mainly arises from lending, derivatives trading and securities financing and is predominantly investment grade. Loan underwriting activity can be lower rated and gives rise to concentrated exposure of a temporary nature.
- Our wealth management businesses predominately conduct securities-based lending and mortgage lending.
- Credit risk within Non-core and Legacy Portfolio relates to derivative transactions, predominantly carried out on a cash-collateralized basis, and securitized positions. ▲

### Audited | Overview of measurement, monitoring and management techniques

- Credit risk arising from transactions with individual counterparties is measured according to our estimates of probability of default, exposure at default and loss given default. Limits are established for individual counterparties and groups of related counterparties covering banking and traded products as well as settlement amounts. Risk control authorities are approved by the Board of Directors and are delegated to the Group Chief Executive Officer, Group Chief Risk Officer and divisional Chief Risk Officers based on risk exposure amounts and internal credit rating.
- Limits apply not only to the current outstanding amount, but also to contingent commitments and the potential future exposure of traded products.
- For the Investment Bank, our monitoring, measurement and limit framework distinguishes between exposures intended to be held to maturity (take-and-hold exposures) and those that are intended to be held for a short term, pending distribution or risk transfer (temporary exposures).
- We also use models to derive portfolio credit risk measures of expected loss, statistical loss and stress loss at the Group-wide and business division levels and establish portfolio limits at these levels.
- Credit risk concentrations can arise if clients are engaged in similar activities, are located in the same geographical region or have comparable economic characteristics, for example, if their ability to meet contractual obligations would be similarly affected by changes in economic, political or other conditions. To avoid credit risk concentrations, we establish limits and / or operational controls that constrain risk concentrations at portfolio and sub-portfolio levels with regard to sector exposure, country risk and specific product exposures. ▲



## Credit risk profile of the Group

The exposures detailed in this section are based on our internal management view of credit risk, which differs in certain respects from the measurement requirements of IFRS.

Internally, we categorize credit risk exposures into two broad categories: banking products and traded products. Banking products comprise drawn loans, undrawn guarantees and loan commitments, amounts due from banks and balances with central banks. Traded products comprise over-the-counter (OTC) derivatives, exchange-traded derivatives (ETD) and securities financing transactions (SFTs), comprised of securities borrowing and lending and repurchase and reverse repurchase agreements.

## Banking products

The breakdowns of our banking products exposures are shown before and after allowances and provisions for credit losses and related single-name credit hedges. The effect of portfolio hedges, such as index credit default swaps (CDS), is not reflected. Guarantees and loan commitments are shown on a notional basis, without applying credit conversion factors.

Total gross banking products exposure decreased to CHF 474 billion as of 31 December 2017 compared with CHF 497 billion at the end of 2016, mainly due to decreases in balances with central banks in Corporate Center – Group Asset and Liability Management (Group ALM) and in loan commitments in the Investment Bank, partly offset by higher loan balances in Wealth Management.

### Banking and traded products exposure by business division and Corporate Center unit

	31.12.17								
<i>CHF million</i>	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
Balances with central banks	427	0	0	0	32	0	86,618	0	87,078
Due from banks	1,356	3,357	1,485	570	8,725	356	2,740	0	18,589
Loans <sup>1</sup>	115,180	53,014	131,380	1	12,094	34	7,226	88	319,016
Guarantees	1,982	460	9,551	0	5,040	105	2	2	17,142
Loan commitments	1,861	347	9,160	0	20,619	0	0	0	31,988
<b>Banking products exposure<sup>2</sup></b>	<b>120,806</b>	<b>57,178</b>	<b>151,576</b>	<b>570</b>	<b>46,510</b>	<b>496</b>	<b>96,585</b>	<b>90</b>	<b>473,813<sup>3</sup></b>
<b>Banking products exposure, net<sup>4</sup></b>	<b>120,701</b>	<b>57,153</b>	<b>151,105</b>	<b>570</b>	<b>44,693</b>	<b>496</b>	<b>96,585</b>	<b>61</b>	<b>471,364</b>
Over-the-counter derivatives <sup>5</sup>	5,547	26	1,234	0			11,444		18,250
Securities financing transactions <sup>5</sup>	0	222	0	0			17,842		18,064
Exchange-traded derivatives <sup>5</sup>	963	1,730	76	0			5,444		8,213
<b>Traded products exposure<sup>5</sup></b>	<b>6,510</b>	<b>1,978</b>	<b>1,310</b>	<b>0</b>			<b>34,729</b>		<b>44,527</b>
<b>Traded products exposure, net<sup>5</sup></b>	<b>6,510</b>	<b>1,978</b>	<b>1,310</b>	<b>0</b>			<b>33,996</b>		<b>43,794</b>
<b>Credit exposure<sup>5</sup></b>	<b>127,316</b>	<b>59,156</b>	<b>152,886</b>	<b>570</b>			<b>178,411</b>		<b>518,339</b>
<b>Credit exposure, net<sup>5</sup></b>	<b>127,211</b>	<b>59,131</b>	<b>152,414</b>	<b>570</b>			<b>175,832</b>		<b>515,158</b>

	31.12.16								
<i>CHF million</i>	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
Balances with central banks	901	0	0	0	37	0	106,162	0	107,100
Due from banks	915	2,635	2,156	544	9,662	455	2,176	0	18,543
Loans <sup>1</sup>	101,876	52,486	133,861	1	12,022	43	5,962	129	306,379
Guarantees	2,187	558	9,023	0	5,336	111	1	4	17,220
Loan commitments	1,730	375	8,861	0	36,496	0	0	481	47,943
<b>Banking products exposure<sup>2</sup></b>	<b>107,608</b>	<b>56,054</b>	<b>153,900</b>	<b>545</b>	<b>63,553</b>	<b>610</b>	<b>114,301</b>	<b>614</b>	<b>497,186<sup>3</sup></b>
<b>Banking products exposure, net<sup>4</sup></b>	<b>107,546</b>	<b>56,025</b>	<b>153,414</b>	<b>545</b>	<b>57,682</b>	<b>610</b>	<b>114,301</b>	<b>418</b>	<b>490,541</b>
Over-the-counter derivatives <sup>5</sup>	5,359	35	1,420	0			17,540		24,353
Securities financing transactions <sup>5</sup>	0	255	0	0			17,414		17,669
Exchange-traded derivatives <sup>5</sup>	926	1,371	125	0			7,031		9,454
<b>Traded products exposure<sup>5</sup></b>	<b>6,285</b>	<b>1,661</b>	<b>1,544</b>	<b>0</b>			<b>41,985</b>		<b>51,476</b>
<b>Traded products exposure, net<sup>5</sup></b>	<b>6,285</b>	<b>1,661</b>	<b>1,544</b>	<b>0</b>			<b>40,833</b>		<b>50,324</b>
<b>Credit exposure<sup>5</sup></b>	<b>113,894</b>	<b>57,716</b>	<b>155,445</b>	<b>545</b>			<b>221,063</b>		<b>548,662</b>
<b>Credit exposure, net<sup>5</sup></b>	<b>113,832</b>	<b>57,686</b>	<b>154,958</b>	<b>545</b>			<b>213,843</b>		<b>540,865</b>

<sup>1</sup> Does not include reclassified securities and similar acquired securities in our CC – Non-core and Legacy Portfolio. <sup>2</sup> Does not include loans designated at fair value. <sup>3</sup> As of 31 December 2017, total banking products exposure of UBS AG consolidated was CHF 2.1 billion higher than the exposure of UBS Group AG consolidated, related to receivables of UBS AG and UBS Switzerland AG against UBS Group AG (31 December 2016: CHF 0.6 billion). <sup>4</sup> Net of allowances, provisions and hedges. <sup>5</sup> As counterparty risk for traded products is managed at counterparty level, no further split between exposures in the Investment Bank, CC – Non-core and Legacy Portfolio and CC – Group ALM is provided.

### Wealth Management

Gross banking products exposure within Wealth Management increased to CHF 121 billion from CHF 108 billion, mainly driven by loan growth in Asia Pacific. Our Wealth Management loan portfolio is mainly secured by securities (Lombard loans) and by residential property. Most of the Lombard loans were of high quality, with 96% rated investment grade based on our internal ratings, and are typically short term in nature with an average duration of three to six months. Moreover, Lombard loans can be canceled immediately if the collateral quality deteriorates or margin calls are not met.

The portfolio of mortgage loans secured by properties outside Switzerland increased to CHF 6.2 billion from CHF 5.5 billion, driven mainly by the UK and Monaco. The overall quality of this portfolio remained high over the year.

### Wealth Management Americas

Gross banking products exposure within Wealth Management Americas increased to CHF 57 billion from CHF 56 billion, driven mainly by increased loan origination. This exposure largely relates to loans secured by securities and by residential property. Out of the loans secured by securities, 99% were rated investment grade based on our internal ratings, compared with 96% in 2016, with the increase driven by a model change.

The portfolio of loans secured by residential property consists primarily of residential mortgage loans offered in the US. Gross exposure increased to CHF 11.4 billion from CHF 10.2 billion. The overall quality of this portfolio remained high with an average loan-to-value ratio (LTV) of 58%, unchanged from 2016, and we have experienced negligible credit losses since the inception of the mortgage program in 2009. Natural disasters that occurred in the US during 2017 had a very limited impact on properties within the mortgage loan portfolio. The five largest geographic concentrations in the portfolio were in California (30%), New York (16%), Florida (10%), Texas (4%) and New Jersey (4%).

### Wealth Management, Wealth Management Americas and Personal & Corporate Banking loan portfolios, gross<sup>1</sup>

	Wealth Management		Wealth Management Americas		Personal & Corporate Banking	
<i>CHF million</i>	<b>31.12.17</b>	31.12.16	<b>31.12.17</b>	31.12.16	<b>31.12.17</b>	31.12.16
Secured by residential property	<b>34,644</b>	32,208	<b>11,367</b>	10,239	<b>95,381</b>	95,966
Secured by commercial / industrial property	<b>2,071</b>	1,974	<b>0</b>	0	<b>16,619</b>	17,819
Secured by cash	<b>10,271</b>	14,436	<b>4,276</b>	1,042	<b>1,458</b>	1,884
Secured by securities	<b>59,946</b>	46,194	<b>36,231</b>	40,182	<b>1,868</b>	1,990
Secured by guarantees and other collateral	<b>7,869</b>	6,697	<b>800</b>	716	<b>6,442</b>	6,707
Unsecured loans	<b>379</b>	366	<b>341</b>	307	<b>9,611</b>	9,496
<b>Total loans, gross</b>	<b>115,180</b>	101,876	<b>53,014</b>	52,486	<b>131,380</b>	133,861
<b>Total loans, net of allowances</b>	<b>115,076</b>	101,814	<b>52,989</b>	52,455	<b>130,939</b>	133,419

<sup>1</sup> Collateral arrangements generally incorporate a range of collateral, including cash, securities, property and other collateral. In 2017, we further aligned our collateral allocation processes within Wealth Management Americas to prioritize collateral mainly according to its liquidity profile. This change resulted in increases in loans secured by cash and decreases in loans secured by securities of CHF 4.5 billion.

### Personal & Corporate Banking

Gross banking products exposure within Personal & Corporate Banking decreased to CHF 152 billion from CHF 154 billion. Net banking products exposure was CHF 151 billion compared with CHF 153 billion, of which approximately 60% was classified as investment grade compared with 61% in the prior year. Around 53% of the exposure is categorized in the lowest loss given default (LGD) bucket of 0% to 25%, compared with 81% in 2016. This significant decrease is due to the introduction of a new LGD framework, leading to higher LGDs mainly for the mortgage business. The size of Personal & Corporate Banking's gross loan portfolio decreased by CHF 2 billion to CHF 131 billion. As of 31 December 2017, 93% of this portfolio was secured by collateral, mainly residential and commercial property. Of the total unsecured amount, 77% related to cash flow-based lending to corporate counterparties and 9% related to lending to public authorities. Based on our internal ratings, 51% of the unsecured loan portfolio was rated investment grade compared with 50% in 2016.

Credit loss expense for this portfolio remained low in 2017. Given the reliance of the Swiss economy on exports, the slight weakening of the Swiss franc may have provided some support to the financials of export-oriented counterparties.

Our Swiss corporate banking products portfolio, which totaled CHF 26.2 billion compared with CHF 25.5 billion, consists of loans, guarantees and loan commitments to multinational and domestic counterparties. The small and medium-sized enterprises portfolio, especially, is well diversified across industries. However, such companies are reliant on the domestic economy and the economies to which they export, in particular the EU and the US. In addition, the development of the EUR / CHF exchange rate is an important risk factor for Swiss corporates.

The delinquency ratio, being the ratio of past due but not impaired loans to total loans, was 0.6% for the corporate loan portfolio compared with 0.7% at the end of 2016.

→ **Refer to "Credit risk models" in this section for more information on loss given default, rating grades and rating agency mappings**

### Swiss mortgage loan portfolio

Our Swiss mortgage loan portfolio secured by residential and commercial real estate in Switzerland continues to be our largest loan portfolio. These mortgage loans totaling CHF 136 billion mainly originate from Personal & Corporate Banking, but also from Wealth Management. CHF 124 billion of these mortgage loans related to residential properties that the borrower was either occupying or renting out, with full recourse to the borrower. Of this CHF 124 billion, CHF 90 billion related to properties occupied by the borrower, with an average LTV ratio of 56% compared with 53% as of 31 December 2016. The average LTV for newly originated loans for this portion was 65%, compared with 62% in 2016. The remaining CHF 34 billion of the Swiss residential mortgage loan portfolio relates to properties rented out by the borrower and the average LTV of this portfolio was 57%, compared with 56% as of 31 December 2016. The average LTV for newly originated Swiss residential mortgage loans for properties rented out by the borrower was 60% compared with 54% in 2016.

As illustrated in the "Swiss mortgages: distribution of net exposure at default (EAD) across exposure segments and loan-to-value (LTV) buckets" table on the next page, over 99% of the aggregate amount of Swiss residential mortgage loans would continue to be covered by the real estate collateral even if the value assigned to that collateral were to decrease by 20%, and 98% would remain covered by the real estate collateral even if the value assigned to that collateral were to decrease by 30%. In this table, the amount of each mortgage loan is allocated across the LTV buckets to indicate the portion at risk at the various value levels shown. For example, a loan of 75 with an LTV ratio of 75% (collateral value of 100) would result in allocations of 30 in the less-than-30% LTV bucket, 20 in the 31–50% bucket, 10 in the 51–60% bucket, 10 in the 61–70% bucket and 5 in the 71–80% bucket.

### Personal & Corporate Banking: distribution of banking products exposure across internal UBS ratings and loss given default (LGD) buckets

Internal UBS rating <sup>1</sup>	31.12.17						31.12.16	
	Exposure	LGD buckets					Weighted average LGD (%)	Exposure
Investment grade	89,975	0–25%	26–50%	51–75%	76–100%	26	94,083	17
Sub-investment grade	61,602	27,210	21,878	10,193	2,321	32	59,817	18
of which: 6–9	55,730	25,234	19,036	9,358	2,101	32	52,878	18
of which: 10–12	4,040	1,894	1,266	662	217	32	5,053	14
of which: 13 and defaulted	1,832	82	1,575	172	3	39	1,886	38
Total exposure before deduction of allowances and provisions	151,576	80,776	49,827	16,701	4,272	28	153,900	17
Less: allowances and provisions	(472)						(486)	
<b>Net banking products exposure</b>	<b>151,105</b>						<b>153,414</b>	

<sup>1</sup> The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the "Internal UBS rating scale and mapping of external ratings" table in this section.

### Personal & Corporate Banking: unsecured loans by industry sector

CHF million	31.12.17		31.12.16	
	CHF million	%	CHF million	%
Construction	127	1.3	140	1.5
Financial institutions	1,162	12.1	1,675	17.6
Hotels and restaurants	83	0.9	96	1.0
Manufacturing	1,779	18.5	1,188	12.5
Private households	1,367	14.2	1,334	14.0
Public authorities	877	9.1	1,221	12.9
Real estate and rentals	181	1.9	143	1.5
Retail and wholesale	1,978	20.6	1,694	17.8
Services	1,821	18.9	1,748	18.4
Other	236	2.5	258	2.7
<b>Net exposure</b>	<b>9,611</b>	<b>100.0</b>	<b>9,496</b>	<b>100.0</b>

### Swiss mortgages: distribution of net exposure at default (EAD) across exposure segments and loan-to-value (LTV) buckets

CHF billion, except where indicated	Exposure segment	31.12.17							31.12.16	
		LTV buckets							Total	Total
		≤30%	31–50%	51–60%	61–70%	71–80%	81–100%	>100%		
	Residential mortgages	67.3	31.5	9.3	5.0	1.9	0.3	0.0	115.4	114.6
	as a % of row total	58	27	8	4	2	0	0	100	
	Income-producing real estate (IPRE)	10.7	4.8	1.4	0.7	0.2	0.0	0.0	17.9	19.1
	as a % of row total	60	27	8	4	1	0	0	100	
	Corporates	5.4	2.2	0.6	0.3	0.2	0.1	0.1	8.9	8.7
	as a % of row total	61	25	7	4	2	1	1	100	
	Other segments	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.9	1.0
	as a % of row total	65	21	7	5	2	0	0	100	
	<b>Mortgage-covered exposure</b>	<b>84.0</b>	<b>38.7</b>	<b>11.3</b>	<b>6.1</b>	<b>2.3</b>	<b>0.5</b>	<b>0.1</b>	<b>143.0</b>	<b>143.5</b>
	as a % of total	59	27	8	4	2	0	0	100	
	Mortgage-covered exposure 31.12.16	86.7	38.8	10.7	5.3	1.7	0.3	0.1	143.5	
	as a % of total	60	27	7	4	1	0	0	100	

### Asset Management

Gross banking products exposure within Asset Management was less than CHF 1 billion as of 31 December 2017 and 31 December 2016.

### Investment Bank

The Investment Bank's lending activities are largely associated with corporate and non-bank financial institutions. The business is broadly diversified across industry sectors, but concentrated in North America.

During 2017, the gross banking products exposure of the Investment Bank decreased to CHF 47 billion from CHF 64 billion. The decrease was due to lower corporate lending exposure, which also includes temporary loan underwriting activity.

Within the loan underwriting business, we continued to see a steady flow of transactions as leveraged loan markets remained relatively strong. Total temporary underwriting exposure ended 2017 significantly lower than the previous year as our ability to distribute was robust, while a large investment grade merger and acquisition financing commitment, which had exceeded our targeted distribution date, expired unused during the second quarter of 2017. Loan underwriting exposures are classified as held for trading, with fair values reflecting market conditions at the end of 2017.

The Investment Bank actively manages the credit risk of this portfolio and, as of 31 December 2017, held CHF 1.8 billion of single-name CDS hedges against its exposures to corporates and other non-banks, a decrease of CHF 4.1 billion year on year.

Net banking products exposure, excluding balances with central banks and the vast majority of amounts due from banks, and after allowances, provisions and hedges, decreased to CHF 36.6 billion from CHF 49.9 billion, driven by the aforementioned lower level of corporate lending at the end of 2017. Based on our internal ratings, 57% of the Investment Bank's net banking products exposure was classified as investment grade compared with 63% at the end of the prior year. The majority of the Investment Bank's net banking products exposure had an estimated LGD of between 0% and 50%.

Many counterparties in the energy segments adapted in 2017 to operating in a lower oil price environment, hence price volatility during the year had very little impact on our portfolio. Overall, while our exposures remain relatively stable, we continue to actively monitor exposures to this sector.

→ **Refer to "Credit risk models" in this section for more information on loss given default, rating grades and rating agency mappings**

### Investment Bank: banking products<sup>1</sup>

CHF million	31.12.17	31.12.16
Total exposure, before deduction of allowances, provisions and hedges	38,439	55,709
Less: allowances, provisions	(42)	(41)
Less: credit protection bought (credit default swaps, notional) <sup>2</sup>	(1,755)	(5,810)
<b>Net exposure after allowances, provisions and hedges</b>	<b>36,643</b>	<b>49,859</b>

<sup>1</sup> Internal risk view, excludes balances with central banks, internal risk adjustments and the vast majority of due from banks exposures. <sup>2</sup> The effects of portfolio hedges, such as index credit default swaps (CDSs), and of loss protection from the subordinated tranches of structured credit protection are not reflected in this table.

### Investment Bank: distribution of net banking products exposure across internal UBS ratings and loss given default (LGD) buckets

CHF million, except where indicated

Internal UBS rating <sup>1</sup>	31.12.17					Weighted average LGD (%)	31.12.16	
	Exposure	LGD buckets					Exposure	Weighted average LGD (%)
		0–25%	26–50%	51–75%	76–100%			
Investment grade	20,704	5,738	9,708	1,516	3,742	49	31,398	50
Sub-investment grade	15,939	10,435	4,378	669	456	22	18,461	23
of which: 6–9	10,376	8,266	1,456	653	0	17	12,444	21
of which: 10–12	5,282	1,989	2,821	15	456	33	5,391	29
of which: 13 and defaulted	281	180	101	0	0	19	625	11
<b>Net banking products exposure, after application of credit hedges</b>	<b>36,643</b>	<b>16,174</b>	<b>14,087</b>	<b>2,185</b>	<b>4,198</b>	<b>37</b>	<b>49,859</b>	<b>40</b>

<sup>1</sup> The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the "Internal UBS rating scale and mapping of external ratings" table in this section.

### Investment Bank: net banking products exposure by geographical region

	31.12.17		31.12.16	
	CHF million	%	CHF million	%
Asia Pacific	1,424	3.9	1,978	4.0
Latin America	164	0.4	212	0.4
Middle East and Africa	73	0.2	32	0.1
North America	27,087	73.9	37,691	75.6
Switzerland	135	0.4	3,128	6.3
Rest of Europe	7,761	21.2	6,818	13.7
<b>Net exposure</b>	<b>36,643</b>	<b>100.0</b>	<b>49,859</b>	<b>100.0</b>

### Investment Bank: net banking products exposure by industry sector

	31.12.17		31.12.16	
	CHF million	%	CHF million	%
Banks	1,399	3.8	3,101	6.2
Chemicals	843	2.3	4,112	8.2
Electricity, gas, water supply	2,425	6.6	2,515	5.0
Financial institutions, excluding banks	13,207	36.0	19,990	40.1
Manufacturing <sup>1</sup>	4,123	11.3	4,195	8.4
Mining <sup>1</sup>	2,755	7.5	2,838	5.7
Public authorities	963	2.6	1,573	3.2
Real estate and construction	3,340	9.1	3,588	7.2
Retail and wholesale	971	2.6	870	1.7
Technology and communications	2,687	7.3	3,153	6.3
Transport and storage <sup>1</sup>	2,798	7.6	3,166	6.3
Other	1,131	3.1	756	1.5
<b>Net exposure<sup>1</sup></b>	<b>36,643</b>	<b>100.0</b>	<b>49,859</b>	<b>100.0</b>
of which: oil and gas <sup>1</sup>	4,290	11.7	5,069	10.2

<sup>1</sup> As of 31 December 2017, the CHF 4.3 billion Investment Bank net banking products exposure to the oil and gas sector comprised CHF 2.3 billion related to mining, CHF 1.5 billion related to transport and storage and CHF 0.4 billion related to manufacturing. As of 31 December 2016, the CHF 5.1 billion Investment Bank net banking products exposure to the oil and gas sector comprised CHF 2.2 billion related to mining, CHF 2.0 billion related to transport and storage and CHF 0.9 billion related to manufacturing.

### Corporate Center – Group Asset and Liability Management

Gross banking products exposure within Corporate Center – Group Asset and Liability Management (Group ALM), which arises primarily in connection with treasury activities, decreased by CHF 18 billion to CHF 97 billion. This was driven by a decrease in balances with central banks of CHF 20 billion, mainly due to higher consumption by the business divisions, partly offset by net issuances of short-term and long-term debt.

→ Refer to “Balance sheet assets – Group ALM” in the “Treasury management” section of this report

### Corporate Center – Non-core and Legacy Portfolio

→ Refer to the “Corporate Center – Non-core and Legacy Portfolio” section under “Financial and operating performance” of this report for more information

### Traded products

Traded products include over-the-counter (OTC) derivatives exposures, as well as securities financing transactions (SFTs) and exchange-traded derivatives (ETD) exposures. Credit risk arising from traded products, after the effects of master netting agreements but excluding credit valuation adjustments and hedges, decreased by CHF 7 billion to CHF 45 billion as of

31 December 2017. OTC derivatives accounted for CHF 18 billion, exposures from SFTs were CHF 18 billion, and ETD exposures amounted to CHF 8 billion. OTC derivatives exposures are generally measured as net positive replacement values after the application of legally enforceable netting agreements and the deduction of cash and marketable securities held as collateral. SFT exposures are reported taking into account collateral received, and ETD exposures take into account collateral margin calls.

The majority of the traded products exposures were within the Investment Bank, Non-core and Legacy Portfolio and Group ALM, totaling CHF 35 billion compared with CHF 42 billion as of 31 December 2016. As counterparty risk for traded products is managed at counterparty level, no further split between exposures in the Investment Bank and those in Non-core and Legacy Portfolio and Group ALM is provided. The traded products exposure includes OTC derivatives exposures of CHF 11 billion in the Investment Bank and Non-core and Legacy Portfolio, a decrease of CHF 6 billion from the prior year. During 2017, SFT exposures increased slightly to CHF 18 billion and ETD exposures decreased by CHF 2 billion to CHF 5 billion. The tables below and on the following pages provide more information on the OTC derivatives, SFT and ETD exposures of the Investment Bank, Non-core and Legacy Portfolio and Group ALM.

### Investment Bank, Non-core and Legacy Portfolio and Group ALM: traded products exposure

CHF million	31.12.17			Total	Total
	OTC derivatives	SFTs	ETD		
		31.12.17			31.12.16
Total exposure, before deduction of credit valuation adjustments and hedges	11,442	17,810	5,444	34,696	41,941
Less: credit valuation adjustments and allowances	(297)			(297)	(376)
Less: credit protection bought (credit default swaps, notional)	(436)			(436)	(757)
<b>Net exposure after credit valuation adjustments, allowances and hedges</b>	<b>10,710</b>	<b>17,810</b>	<b>5,444</b>	<b>33,964</b>	<b>40,808</b>

### Investment Bank, Non-core and Legacy Portfolio and Group ALM: distribution of net OTC derivatives and SFT exposure across internal UBS ratings and loss given default (LGD) buckets

Internal UBS rating <sup>1</sup>	31.12.17						31.12.16	
	Exposure	LGD buckets				Weighted average LGD (%)	Exposure	Weighted average LGD (%)
		0–25%	26–50%	51–75%	76–100%			
<b>Net OTC derivatives exposure</b>								
Investment grade	10,076	304	8,604	1,016	152	45	15,672	30
Sub-investment grade	633	56	437	73	67	41	723	34
of which: 6–9	226	43	52	69	62	62	294	46
of which: 10–12	59	0	50	4	5	41	85	34
of which: 13 and defaulted	349	13	335	0	0	27	344	24
<b>Total net OTC derivatives exposure, after credit valuation adjustments and hedges</b>	<b>10,710</b>	<b>361</b>	<b>9,041</b>	<b>1,088</b>	<b>220</b>	<b>45</b>	<b>16,395</b>	<b>30</b>
<b>Net SFT exposure</b>								
Investment grade	17,302	14	14,530	2,303	455	44	16,877	28
Sub-investment grade	508	1	156	53	297	72	504	58
<b>Total net SFT exposure</b>	<b>17,810</b>	<b>14</b>	<b>14,686</b>	<b>2,357</b>	<b>752</b>	<b>44</b>	<b>17,381</b>	<b>28</b>

<sup>1</sup> The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the “Internal UBS rating scale and mapping of external ratings” table in this section.

### Investment Bank, Non-core and Legacy Portfolio and Group ALM: net OTC derivatives and SFT exposure by geographical region

	Net OTC derivatives				Net SFTs			
	31.12.17		31.12.16		31.12.17		31.12.16	
	CHF million	%	CHF million	%	CHF million	%	CHF million	%
Asia Pacific	1,154	10.8	2,904	17.7	3,624	20.3	3,410	19.6
Latin America	59	0.5	83	0.5	144	0.8	114	0.7
Middle East and Africa	143	1.3	149	0.9	622	3.5	1,126	6.5
North America	3,420	31.9	4,931	30.1	4,241	23.8	4,548	26.2
Switzerland	292	2.7	453	2.8	771	4.3	825	4.7
Rest of Europe	5,642	52.7	7,876	48.0	8,407	47.2	7,358	42.3
<b>Net exposure</b>	<b>10,710</b>	<b>100.0</b>	<b>16,395</b>	<b>100.0</b>	<b>17,810</b>	<b>100.0</b>	<b>17,381</b>	<b>100.0</b>

### Investment Bank, Non-core and Legacy Portfolio and Group ALM: net OTC derivatives and SFT exposure by industry

	Net OTC derivatives				Net SFTs			
	31.12.17		31.12.16		31.12.17		31.12.16	
	CHF million	%	CHF million	%	CHF million	%	CHF million	%
Banks	4,559	42.6	6,242	38.1	5,288	29.7	4,095	23.6
Chemicals	11	0.1	17	0.1				
Electricity, gas, water supply	166	1.5	231	1.4				
Financial institutions, excluding banks	3,600	33.6	6,778	41.3	10,983	61.7	11,932	68.6
Manufacturing	139	1.3	428	2.6				
Mining	7	0.1	108	0.7				
Public authorities	1,513	14.1	1,834	11.2	1,500	8.4	1,350	7.8
Retail and wholesale	9	0.1	19	0.1	3	0.0	2	0.0
Transport, storage and communication	289	2.7	265	1.6				
Other	417	3.9	473	2.9	35	0.2	2	0.0
<b>Net exposure</b>	<b>10,710</b>	<b>100.0</b>	<b>16,395</b>	<b>100.0</b>	<b>17,810</b>	<b>100.0</b>	<b>17,381</b>	<b>100.0</b>

### Credit risk mitigation

**Audited |** We actively manage the credit risk in our portfolios by taking collateral against exposures and by utilizing credit hedging. ▲

### Lending secured by real estate

**Audited |** We use a scoring model as part of a standardized front-to-back process to support credit decisions for the origination or modification of Swiss mortgage loans. The two key factors within this model are an affordability calculation relative to gross income and the loan-to-value (LTV) ratio. ▲

The calculation of affordability takes into account interest payments, minimum amortization requirements, potential property maintenance costs and, in the case of properties expected to be rented out, the level of rental income. Interest payments are estimated using a predefined framework, which takes into account the potential for significant increases in interest rates during the lifetime of the loan. The interest rate is floored at 5% per annum.

For residential properties occupied by the borrower, the maximum LTV allowed within the standard approval process is 80%. This is reduced to 60% in the case of vacation properties and luxury real estate. For other properties, the maximum LTV allowed within the standard approval process ranges from 30%

to 80%, depending on the type of property, the age of the property and the amount of renovation work required.

**Audited |** The value assigned by UBS to each property is based on the lowest value determined from internally calculated valuations, the purchase price and, in some cases, an additional external valuation. ▲

We use two separate models provided by a market-leading external vendor to derive property valuations for owner-occupied residential properties (ORP) and income-producing real estate. For ORP, we estimate the current value of properties by using a regression model (hedonic model) to compare detailed characteristics for each property against a database of property transactions. In addition to the model-derived values, valuations for ORP are updated quarterly throughout the lifetime of the loan by using region-specific real estate price indices. The price indices are sourced from an external vendor and are subject to internal validation and benchmarking against two other external vendors. On a quarterly basis, we use these valuations to compute indexed LTV for all ORP and consider these together with other risk measures (e.g., rating migration and behavioral information) to identify higher-risk loans, which are then reviewed individually by client advisors and credit officers, with actions taken where they are considered necessary.



For income-producing real estate, the capitalization model is used to determine the property valuation by discounting estimated sustainable future income using a capitalization rate based on various attributes. These attributes consider regional as well as specific property characteristics, such as market and location data (e.g., vacancy rates), benchmarks (e.g., for running costs) and certain other standardized input parameters (e.g., property condition). Rental income from properties is reviewed at a minimum once every three years, but indications of significant changes in the amount of rental income or in the vacancy rate can trigger an interim reappraisal.

To take market developments into account for these models, the external vendor regularly updates the parameters and / or refines the architecture for each model. Model changes and parameter updates are subject to the same validation procedures as for our internally developed models.

**Audited I** We similarly apply underwriting guidelines for our Wealth Management Americas mortgage loan portfolio taking into account affordability of the loans and sufficiency of collateral. The maximum LTV within the standard approval process for any type of mortgage is 80%. A stratification of LTVs exists for the various mortgage types, such as residential mortgage or investment property, based on associated risk factors, such as property types, loan size and loan purpose. Maximum LTVs go as low as 45%. Additionally, other credit risk metrics are applied, based upon property and borrower characteristics, such as debt-to-income ratios, FICO credit scores and required client reserves.

A risk limit framework is applied to the Wealth Management Americas mortgage portfolio. Limits have been established to govern exposures within LTV categories, geographic concentrations, portfolio growth and high-risk mortgage segments such as interest-only loans. These limits are monitored by a specialized credit risk monitoring team and reported to senior management. Supplementing this limit framework is a real estate lending policy and procedures framework, established to govern the real estate lending activities. Quality assurance and quality control programs are in place to monitor compliance with mortgage underwriting and documentation requirements.



- **Refer to “Swiss mortgage loan portfolio” in this section for more information on loan-to-value in our Swiss mortgage portfolio**
- **Refer to “Wealth Management Americas” in this section for more information on loan-to-value in our Wealth Management Americas mortgage portfolio**

### Lombard lending

**Audited I** Lombard loans are secured by a pledge of marketable securities, guarantees and other forms of collateral. Eligible financial securities primarily include transferable securities (such as bonds and equities), that are liquid and actively traded, and other transferable securities such as approved structured products for which regular prices are available and for which the issuer of the security provides a market. To a lesser degree, less liquid collateral is also financed.

We apply discounts (haircuts) to reflect the collateral’s risk and to derive the lending value. Haircuts for marketable securities are calculated to cover the possible change in the market value over a given close-out period and confidence level; the haircut applied will vary depending on the view of the counterparty’s creditworthiness. Less liquid or more volatile collateral will typically attract larger haircuts. For less liquid instruments, such as structured products, some bonds, and products with long redemption periods, the assumed close-out period may be much longer than that for highly liquid instruments, or an assessment is made as to the expected recovery on the asset in the event of the counterparty’s default, resulting in a larger haircut. For cash, life insurance policies, guarantees and letters of credit, haircuts are determined on a product- or client-specific basis.

We also consider concentration and correlation risks across collateral posted on a counterparty level as well as at a divisional level across counterparties. Additionally, we perform targeted Group-wide reviews of concentrations. A concentration of collateral in single securities, issuers or issuer groups, industry sectors, countries, regions or currencies may result in higher risk and reduced liquidity. In such cases, the lending value of the collateral, margin call and close-out levels are adjusted accordingly. ▲

Exposures and collateral values are monitored on a daily basis with the intention of ensuring that the credit exposure continues to be within the established risk appetite. A shortfall occurs when the lending value drops below the exposure. If a shortfall exceeds a defined trigger level, a margin call is initiated, requiring the client to provide additional collateral, reduce the exposure or take other action to bring the exposure in line with the agreed lending value of the collateral. If the shortfall increases, or is not corrected within the required period, a close-out is initiated, through which collateral is liquidated, open derivative positions are closed and guarantees are called.

We also conduct stress testing of collateralized exposures to simulate market events that increase the risk of collateral shortfalls and unsecured exposures by significantly reducing the value of the collateral, increasing the exposure of traded products, or both. For certain classes of counterparties, limits on such calculated stress exposures are applied and controlled on a counterparty level. In addition, there are portfolio limits applied across certain businesses or collateral types.

- **Refer to “Stress loss” in this section for more information on our stress testing**

### Counterparty credit risk

**Audited |** Counterparty credit risk arising from traded products, which include OTC derivatives, ETD exposures and SFTs originating in the Investment Bank, Non-core and Legacy Portfolio and Corporate Center – Group ALM, is generally managed on a close-out basis. This takes into account the effect of market movements on the exposure and any associated collateral over the potential time it would take to close out our positions. In the Investment Bank, limits are applied to the potential future exposure per counterparty, with the size of the limit driven by the view of the creditworthiness of the counterparty as determined by Credit Risk Control. Limit frameworks are also applied to control overall exposure to specific classes or categories of collateral on a portfolio level. Such portfolio limits are monitored and reported to senior management.

Trading in OTC derivatives is conducted through central counterparties (CCPs) where practicable. Where CCPs are not used, we have clearly defined policies and processes for trading on a bilateral basis. Trading is typically conducted under bilateral International Swaps and Derivatives Association (ISDA) or similar master netting agreements, which generally allow for the close-out and netting of transactions in the event of default subject to applicable law. For most major market participant counterparties, we employ two-way collateral agreements under which either party can be required to provide collateral in the form of cash or marketable securities when the exposure exceeds specified levels. This collateral typically consists of well-rated government debt or other collateral permitted by applicable regulations. For certain counterparties, initial margin is taken to cover some or all of the calculated close-out exposure. This is in addition to the variation margin taken to settle changes in the market value of transactions. Regulations governing the margining of uncleared OTC derivatives continue to evolve. These generally expand the scope of bilateral derivatives activity subject to margining. In addition, they will result in greater amounts of initial margin received from, and posted to, certain bilateral trading counterparties than had been required in the past. These changes should result in lower close-out risk over time. ▲

- **Refer to “Note 12 Derivative instruments and hedge accounting” in the “Consolidated financial statements” section of this report for more information on our over-the-counter derivatives settled through central counterparties**
- **Refer to “Note 24 Offsetting financial assets and financial liabilities” in the “Consolidated financial statements” section of this report for more information on the effect of netting and collateral arrangements on our derivative exposures**

### Credit hedging

**Audited |** We utilize single-name CDSs, credit index CDSs, bespoke protection, and other instruments to actively manage credit risk in the Investment Bank and Non-core and Legacy Portfolio. This is aimed at reducing concentrations of risk from specific counterparties, sectors or portfolios and, in the case of counterparty credit risk, the profit or loss impact arising from changes in credit valuation adjustments (CVA).

We maintain strict guidelines for taking credit hedges into account for credit risk mitigation purposes. For example, when monitoring exposures against counterparty limits, we do not usually recognize credit risk mitigants such as proxy hedges (credit protection on a correlated but different name) or credit index CDSs. Buying credit protection also creates credit exposure against the protection provider. We monitor and limit our exposures to credit protection providers and the effectiveness of credit hedges as part of our overall credit exposures to the relevant counterparties. Trading with such counterparties is typically collateralized. For credit protection purchased to hedge the lending portfolio, this includes monitoring mismatches between the maturity of the credit protection purchased and the maturity of the associated loan. Such mismatches result in basis risk and may reduce the effectiveness of the credit protection. Mismatches are routinely reported to credit officers and mitigating actions are taken when deemed necessary. ▲

- **Refer to “Note 12 Derivative instruments and hedge accounting” in the “Consolidated financial statements” section of this report for more information**

### Mitigation of settlement risk

To mitigate settlement risk, we reduce our actual settlement volumes through the use of multilateral and bilateral agreements with counterparties, including payment netting.

Our most significant source of settlement risk is foreign exchange transactions. We are a member of Continuous Linked Settlement (CLS), an industry utility that provides a multilateral framework to settle transactions on a delivery-versus-payment basis, thereby significantly reducing foreign exchange-related settlement risk relative to the volume of business. However, the mitigation of settlement risk through CLS and other means does not fully eliminate our credit risk in foreign exchange transactions resulting from changes in exchange rates prior to settlement, which is managed as part of our overall credit risk management of OTC derivatives.

## Credit risk models

**Audited** | We have developed tools and models in order to estimate future credit losses that may be implicit in our current portfolio.

Exposures to individual counterparties are measured on the basis of three generally accepted parameters: probability of default (PD), loss given default (LGD) and exposure at default (EAD). For a given credit facility, the product of these three parameters results in the expected loss. These parameters are the basis for the majority of our internal measures of credit risk, and are key inputs for the regulatory capital calculation under the advanced internal ratings-based approach of the Basel III

framework governing international convergence of capital. We also use models to derive the portfolio credit risk measures of expected loss, statistical loss and stress loss. ▲

The “Key features of our main credit risk models” table on the next page shows the number and key features of the models that we use to derive PD, LGD and EAD for our main portfolios and asset classes, and is followed by more detailed explanations of these models and parameters.

→ **Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on the regulatory capital calculation under the advanced internal ratings-based approach**

## Key features of our main credit risk models

	Portfolio in scope	Asset class	Model approach	Number of main models	Main drivers	Number of years loss data <sup>1</sup>
<b>Probability of default</b>	Sovereigns and central banks	Central governments and central banks	Score card	1	Political, institutional and economic indicators	10
	Owner-occupied mortgages in Switzerland and the US	Retail: residential mortgages	Score card	2	Behavioral data, affordability relative to income, property type, loan-to-value. Separate models for mortgages in Switzerland and the US	23
	Income-producing real estate mortgages	Retail: residential mortgages, Corporates: specialized lending	Score card	1	Loan-to-value, debt service coverage, financial data (for large corporates only), behavioral data; weights of risk drivers differ between corporate and private clients	23
	Lombard lending	Retail: other	Merton type	1	Loan-to-value, historical asset returns, behavioral data	5–10
	Small and medium-sized enterprises	Corporates: other lending	Score card	1	Financial data including balance sheet ratios and profit and loss, behavioral data. Weights of risk drivers differ depending on the corporate client sub-segment	23
	Banks	Banks and securities dealers	Score card	4	Financial data including balance sheet ratios and profit and loss. Separate models for banks – developed markets, banks – emerging markets, broker-dealers and investment banks, private banks	10
	Commodity traders	Corporates: specialized lending	Rating template	1	Financial data including balance sheet ratios and profit and loss, as well as non-financial criteria	19
	Aircraft financing	Corporates: other lending	Rating template	1	Financial structure of the transaction	7
	Large corporates	Corporates: other lending	Score card / market data	4	Financial data including balance sheet ratios and profit and loss, and market data. Separate models for corporates with publicly traded and highly liquid stocks (Market Intelligence Tool), private corporates, leveraged corporates and corporates in construction and real estate business	10
	Other portfolios	Corporates: other lending, Public sector entities and multilateral development banks	Score card / pooled rating approach / rating template	13	Financial data and / or historical portfolio performance for pooled ratings. Separate models for hedge funds, managed funds, insurance companies, retail aggregators, commercial real estate loans, mortgage originators, Australian protected lending clients, ETD-only clients and sub-sovereigns / public-sector entities	10
<b>Loss given default</b>	Owner-occupied mortgages in Switzerland and the US	Retail: residential mortgages	Statistical model	2	Loan-to-value, time since last valuation. Separate models for mortgages in Switzerland and the US	11
	Income-producing real estate mortgages	Retail: residential mortgages, Corporates: specialized lending	Statistical model	1	Loan-to-value, time since last valuation, property type, location indicator	11
	Lombard lending	Retail: other	Statistical model, simulation	1	Historical observed loss rates	10–15
	Small and medium-sized enterprises	Corporates: other lending	Statistical model	2	Separate models for mortgage and non-mortgage LGDs. Mortgage models: loan-to-value, time since last valuation, property type, location indicator. Non-mortgage models: historical observed loss rates	11–17
	Investment Bank – all counterparties	Across the asset classes	Statistical model	1	Counterparty- and facility-specific drivers, including industry segment, collateral, seniority, legal environment and bankruptcy procedures	5–10
<b>Exposure at default</b>	Banking products	Across the asset classes	Statistical model	3	Separate models based on exposure type (committed credit lines, revocable credit lines, contingent products)	>10
	Traded products	Across the asset classes	Statistical model	2	Product-specific market drivers, e.g., interest rates. Separate models for OTC Derivatives, ETDs and SFTs that generate the simulation of risk factors used for the credit exposure measure	n/a

<sup>1</sup> For sovereign and Investment Bank PD models, the length of internal portfolio history is shown in "Number of years loss data."

Audited I

## Internal UBS rating scale and mapping of external ratings

Internal UBS rating	1-year PD range in %	Description	Moody's Investors Service mapping	Standard & Poor's mapping	Fitch mapping
0 and 1	0.00–0.02	Investment grade	Aaa	AAA	AAA
2	0.02–0.05		Aa1 to Aa3	AA+ to AA–	AA+ to AA–
3	0.05–0.12		A1 to A3	A+ to A–	A+ to A–
4	0.12–0.25		Baa1 to Baa2	BBB+ to BBB	BBB+ to BBB
5	0.25–0.50		Baa3	BBB–	BBB–
6	0.50–0.80	Sub-investment grade	Ba1	BB+	BB+
7	0.80–1.30		Ba2	BB	BB
8	1.30–2.10		Ba3	BB–	BB–
9	2.10–3.50		B1	B+	B+
10	3.50–6.00		B2	B	B
11	6.00–10.00		B3	B–	B–
12	10.00–17.00		Caa	CCC	CCC
13	>17		Ca to C	CC to C	CC to C
Counterparty is in default	Default	Defaulted		D	D

### Probability of default

The probability of default (PD) is an estimate of the likelihood of a counterparty defaulting on its contractual obligations over the next 12 months. PD ratings are used for credit risk measurement and are an important input for determining credit risk approval authorities. For the calculation of RWA, a 3-basis-points PD floor is applied to Banks, Corporates and Retail exposures as required under the Basel III framework. Additionally, for the Swiss owner-occupied mortgages we apply an 8-basis-point PD floor and for the Lombard loans a 4-basis-point PD floor.

PD is assessed using rating tools tailored to the various categories of counterparties. Statistically developed score cards, based on key attributes of the obligor, are used to determine PD for many of our corporate clients and for loans secured by real estate. Where available, market data may also be used to derive the PD for large corporate counterparties. For low default portfolios, where available, we take into account relevant external default data in the rating tool development. For Lombard loans, Merton-type historical return-based model simulations taking into account potential changes in the value of securities collateral are used in our rating approach. These categories are also calibrated to our internal credit rating scale (masterscale), which is designed to ensure a consistent assessment of default probabilities across counterparties. Our masterscale expresses one-year default probabilities that we determine through our various rating tools by means of distinct classes, whereby each class incorporates a range of default probabilities. Counterparties migrate between rating classes as our assessment of their PD changes.

The ratings of the major credit rating agencies, and their mapping to our internal rating masterscale and internal PD bands, are shown in the "Internal UBS rating scale and mapping of external ratings" table above. The mapping is based on the long-term average of one-year default rates available from the rating

agencies. For each external rating category, the average default rate is compared with our internal PD bands to derive a mapping to our internal rating scale. Our internal rating of a counterparty may therefore diverge from one or more of the correlated external ratings shown in the table. Observed defaults by rating agencies may vary through economic cycles, and we do not necessarily expect the actual number of defaults in our equivalent rating band to equal the rating agencies' average in any given period. We periodically assess the long-term average default rates of credit rating agencies' grades, and we adjust their mapping to our masterscale as necessary to reflect any material changes.

### Loss given default

Loss given default (LGD) is the magnitude of the likely loss if there is a default. Our LGD estimates, which consider downturn conditions, include loss of principal, interest and other amounts (such as workout costs, including the cost of carrying an impaired position during the workout process) less recovered amounts. We determine LGD based on the likely recovery rate of claims against defaulted counterparties, which depends on the type of counterparty and any credit mitigation by way of collateral or guarantees. Our estimates are supported by our internal loss data and external information where available. Where we hold collateral, such as marketable securities or a mortgage on a property, loan-to-value ratios typically are a key parameter in determining LGD. For low default portfolios, where available, we take into account relevant external default data in the rating tool development. In the RWA calculation, the regulatory LGD floor of 10% is applied for exposures secured by residential properties. Additionally, we applied a 30% LGD floor for Lombard loans in Wealth Management and a 25% LGD floor for Lombard loans in Wealth Management Americas. All other LGDs are subject to a 5% floor.

### Exposure at default

Exposure at default (EAD) represents the amount we expect to be owed by a counterparty at the time of a possible default. We derive EAD from our current exposure to the counterparty and the possible future development of that exposure.

The EAD of a loan is the drawn or face value of the loan. For loan commitments and guarantees, the EAD includes the amount drawn as well as potential future amounts that may be drawn, which are estimated using credit conversion factors (CCFs) based on historical observations. To comply with regulatory guidance, we floor individual observed CCF values at zero in the CCF model, i.e., we assume that the drawn exposure at default will be no less than the drawn amount one year prior to default.

For traded products, we derive the EAD by modeling the range of possible exposure outcomes at various points in time using scenario and statistical techniques. We assess the net amount that may be owed to us or that we may owe to others, taking into account the effect of market moves over the potential time it would take to close out our positions. For exchange-traded derivatives, our calculation of EAD takes into account collateral margin calls. When measuring individual counterparty exposure against credit limits, we consider the maximum likely exposure measured to a high level of confidence. However, when aggregating exposures to different counterparties for portfolio risk measurement purposes, we use the expected exposure to each counterparty at a given time period (usually one year) generated by the same model.

We assess our exposures where there is a material correlation between the factors driving the credit quality of the counterparty and those driving the potential future value of our traded products exposure (wrong-way risk), and we have established specific controls to mitigate these risks.

### Expected loss

Credit losses are an inherent cost of doing business and the occurrence and amount of credit losses can be erratic. In order to quantify future credit losses that may be implicit in our current portfolio, we use the concept of expected loss.

Expected loss is a statistical measure used to estimate the average annual costs we expect to experience from positions that become impaired. The expected loss for a given credit facility is a product of the three components described above: PD, EAD and LGD. We aggregate the expected loss for individual counterparties to derive our expected portfolio credit losses.

Expected loss is the basis for quantifying credit risk in all our portfolios. It is also the starting point for the measurement of our portfolio statistical loss and stress loss.

We use a statistical modeling approach to estimate the loss profile of each of our credit portfolios over a one-year period to a specified level of confidence. The mean value of this loss distribution is the expected loss. The loss estimates deviate from the mean value due to statistical uncertainty on the defaulting counterparties and to systematic default relationships among counterparties within and between segments. The statistical measure is sensitive to concentration risks on individual counterparties and groups of counterparties. The outcome provides an indication of the level of risk in our portfolio and the way it may develop over time.

→ **Refer to "IFRS 9, *Financial Instruments*" in the "Significant accounting and financial reporting changes in 2018" section of this report for more information on future requirements of the expected credit loss methodology under IFRS 9**

### Stress loss

We complement our statistical modeling approach with scenario-based stress loss measures. Stress tests are run on a regular basis to monitor the potential impact of extreme, but nevertheless plausible, events on our portfolios, under which key credit risk parameters are assumed to deteriorate substantially. Where we consider it appropriate, we apply limits on this basis.

Stress scenarios and methodologies are tailored to the nature of the portfolios, ranging from regionally focused to global systemic events, and varying in time horizon. For example, for our loan underwriting portfolio, we apply a global market event under which, simultaneously, the market for loan syndication freezes, market conditions significantly worsen, and credit quality deteriorates. Similarly, for Lombard lending, we apply a range of scenarios representing instantaneous market shocks to all collateral and exposure positions, taking into consideration their liquidity and potential concentrations. The portfolio-specific stress test for our mortgage lending business in Switzerland reflects a multi-year event, and the overarching stress test for global wholesale and counterparty credit risk to corporates uses

a one-year global stress event and takes into account exposure concentrations to single counterparties.

→ **Refer to “Stress testing” in this section for more information on our stress testing framework**

### Credit risk model confirmation

Our approach to model confirmation involves both quantitative methods, including monitoring compositional changes in the portfolios and the results of backtesting, and qualitative assessments, including feedback from users on the model output as a practical indicator of the performance and reliability of the model.

Material changes in a portfolio composition may invalidate the conceptual soundness of the model. We therefore perform regular analysis of the evolution of portfolios to identify such changes in the structure and credit quality of portfolios. This includes analysis of changes in key attributes, changes in portfolio concentration measures, as well as changes in RWA.

→ **Refer to “Risk measurement” in this section for more information on our approach to model confirmation procedures**

### Main credit models backtesting by regulatory asset class

	Length of time series used for the calibration (in years)	Actual rates in %			Estimated average rates at the start of 2017 in %
		Average of last 5 years <sup>1</sup>	Min. of last 5 years <sup>2</sup>	Max. of last 5 years <sup>2</sup>	
<b>Probability of default<sup>3</sup></b>					
Central governments and central banks	> 10 <sup>4</sup>	0.00	0.00	0.00	0.35
Banks and securities dealers	> 10	0.17	0.00	0.53	0.71
Public sector entities, multilateral development banks	> 10	0.06	0.00	0.19	0.20
Corporates: specialized lending	> 10	0.25	0.15	0.39	0.98
Corporates: other lending	> 10	0.23	0.21	0.26	0.49
Retail: residential mortgages	> 20	0.17	0.12	0.28	0.57
Retail: other	> 10	0.01	0.00	0.02	0.15
<b>Loss given default</b>					
Central governments and central banks	> 10				40.42
Banks and securities dealers	> 10	0.00			42.09
Public sector entities, multilateral development banks	> 10				21.44
Corporates: specialized lending	> 10	8.02	0.00	20.48	15.72
Corporates: other lending	> 10	24.65	14.41	28.86	22.61
Retail: residential mortgages	> 20	1.48	0.26	2.63	7.28
Retail: other	> 10	13.43	8.48	65.26	20.00
<b>Credit conversion factors</b>					
Corporates	>10	24.09	6.87	44.32	37.97

<sup>1</sup> Average of all observations over the last five years. <sup>2</sup> Minimum / maximum annual average of observations in any single year from the last five years. Yearly averages are only calculated where five or more observations occurred during that year. <sup>3</sup> Average PD estimation is based on all rated clients in the portfolio. <sup>4</sup> Sovereign PD model is calibrated to UBS masterscale, length of time series shows span of internal history for this portfolio.

### Backtesting

We monitor the performance of our models by backtesting and benchmarking them, whereby model outcomes are compared with actual results, based on our internal experience as well as externally observed results. To assess the predictive power of our credit exposure models for traded products such as OTC derivatives and ETD products, we statistically compare the predicted future exposure distributions at different forecast horizons with the realized values.

For PD, we use statistical modeling to derive a predicted distribution of the number of defaults. The observed number of defaults is then compared with this distribution, allowing us to derive a statistical level of confidence in the model conservativeness. In addition, we derive a lower and upper bound for the average default rate. If the portfolio average PD lies outside the derived interval, the rating tool is, as a general rule, recalibrated.

For LGD, the backtesting statistically tests whether the mean difference between the observed and predicted LGD is zero. If the test fails, then there is evidence that our predicted LGD is too low. In such cases, models are recalibrated where these differences are outside expectations.

Credit conversion factors (CCFs), used for the calculation of EAD for undrawn facilities with corporate counterparties, are dependent on several contractual dimensions of the credit facility. We compare the predicted amount drawn with observed historical utilization of such facilities for defaulted counterparties. If any statistically significant deviation is observed, the relevant CCFs are redefined.

The “Main credit models backtesting by regulatory asset class” table on the previous page compares the current model calibration for PD, LGD and CCFs with historical observed values over the last five years.

### Changes to models and model parameters during the period

As part of our continuous efforts to enhance models to reflect market developments and newly available data, we updated several models in the course of 2017.

Within Personal & Corporate Banking and Wealth Management, we updated the PD model for income-producing real estate mortgages from a transaction rating approach to a counterparty-based rating approach where financial and behavioral data of the client is now taken into account. Additionally, we enhanced the PD model for Swiss owner-occupied mortgages to include behavioral information via a vendor credit score. New LGD models were implemented for most of the portfolios in Personal & Corporate Banking and the mortgage portfolios in Wealth Management. The RWA impact of the new LGD model and the new PD model for the Swiss owner-occupied mortgages will be phased in over the years 2018 and 2019.

→ Refer to “Risk-weighted assets” in the “Capital management” section of this report for more information on the impact of the changes to models and model parameters on credit risk RWA

For the Lombard portfolio, we globally implemented redeveloped PD and LGD models. These models reflect a Monte Carlo-based historical simulation approach, taking into account the individual client’s loan-to-value and historical securities return data including the financial crisis of 2007-2009.

Within the Investment Bank, we have recalibrated the rating tool for residential real estate mortgage finance originators, bringing resulting PDs to a more conservative level.

With respect to the LGD model used for sovereigns, multinationals and financial institutions (mainly counterparties of the Investment Bank and Corporate Center – Group ALM), the model was recalibrated, which impacted mainly banks and non-leveraged managed funds. Other corporates and sovereigns were impacted to a lesser extent.

With regard to the EAD, we implemented revised credit conversion factors for contingent products and construction loans in Personal & Corporate Banking and for unutilized Lombard loan facilities in our wealth management businesses.

As part of a review of our internal rating models, we transferred our unsecured lending portfolio of private clients and account overdrafts from the internal ratings-based approach to the standardized approach for the RWA calculation.

Where required, changes to models and model parameters were approved by the Swiss Financial Market Supervisory Authority (FINMA) prior to implementation.

### Future credit risk-related regulatory capital developments

In December 2017, the Basel Committee on Banking Supervision published the final Basel III framework to be implemented until 1 January 2022. The updated framework has made a number of revisions to the internal ratings-based (IRB) approaches, namely: (i) removing the possibility to use the advanced IRB (A-IRB) approach for certain asset classes (including large and medium-sized corporates, banks and other financial institutions); (ii) placing floors on certain model inputs under the IRB approach, such as for PD and LGD; and (iii) introducing various requirements to reduce RWA variability, for example, for LGD.

The published framework has a number of requirements that are subject to national discretion. In addition, revisions to the credit valuation adjustment (CVA) framework were published, including the removal of the advanced CVA (A-CVA) approach. UBS maintains a close dialog with FINMA to discuss in more detail the implementation objectives and to ensure a smooth transition of the capital regime for credit risk.

- Refer to “Capital management objectives, planning and activities” in the “Capital management” section of this report for more information on the development of RWA
- Refer to “Risk measurement” in this section for more information on our approach to model confirmation procedures
- Refer to the “Regulatory and legal developments” and “Risk factors” sections of this report for more information



## Policies for past due, non-performing and impaired claims

The diagram “Exposure categorization” on the next page illustrates how we categorize banking products and SFTs as performing, non-performing and / or impaired.

**Audited I** For products accounted for on a fair value basis, such as OTC derivatives, credit deterioration is recognized through a credit valuation adjustment (CVA), and these products are therefore not subject to the impairment framework.

We consider a claim held at amortized cost (loans and SFTs) and certain off-balance sheet commitments to be past due when a contractual payment has not been received by its contractual due date, or in case of account overdrafts, i.e., where the credit limit is exceeded. Past due claims are not considered impaired where we otherwise expect to collect all amounts due under the contractual terms of the claims.

A past due claim is considered non-performing when (i) the payment of interest, principal or fees is past due by more than 90 days, or more than 180 days for certain specified retail portfolios. Claims are also classified as non-performing when (ii) the counterparty is subject to bankruptcy, or insolvency proceedings or enforced liquidation have commenced or (iii) obligations have been restructured on preferential terms, such as preferential interest rates, extension of maturity, modifying the schedule of repayments or subordination.

Claims are classified as impaired if, following an individual impairment assessment, an allowance or provision for credit losses is established. Accordingly, both performing and non-performing loans may be classified as impaired.

When a financial asset has become non-performing, individually impaired or otherwise has defaulted, the counterparty is rated as in default according to our UBS internal rating scale. ▲

## Restructured claims

**Audited I** Under imminent payment default or where default has already occurred, we sometimes restructure claims by providing concessions that we would otherwise not consider and that are outside our normal risk appetite, such as preferential interest rates, extension of maturity, modifying the schedule of repayments, debt/equity swap and subordination. When a credit restructuring takes place, each case is considered individually and the exposure is classified as defaulted and assessed for impairment. It will remain so, until the loan is collected or written off, non-preferential conditions are granted that supersede the preferential conditions or until the counterparty has recovered and the preferential conditions no longer exceed our risk appetite.

Contractual adjustments when there is no evidence of imminent payment default, or where changes to terms and conditions are within our usual risk appetite, are not considered to be a credit restructuring. ▲

## Individual and collective impairment assessments

**Audited I** Claims are assessed individually for impairment where there are indicators that an impairment may exist. Otherwise, portfolios of claims with similar credit risk characteristics are included in a collective impairment assessment. ▲

## Individual impairment assessment

**Audited I** Non-performing status is considered an indicator that a loan may be impaired and therefore non-performing claims are assessed individually for impairment. However, an impairment analysis would be carried out irrespective of non-performing status if other objective evidence indicates that a loan may be impaired. Any event that impacts current and future cash flows may be an indication of impairment and trigger an assessment by the risk officer. Such events may be (i) significant collateral shortfalls due to a fall in lending values (securities and real estate), (ii) increase in loan exposure, (iii) significant financial difficulties of a client and (iv) high probability of the client's bankruptcy, debt moratorium or financial reorganization.

Individual claims are assessed for impairment based on the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The recoverable amount is determined from all relevant cash flows, and where this is lower than the carrying amount of the claim, the claim is considered impaired.

We have established processes to determine the carrying values of impaired claims in compliance with IFRS requirements. Our credit controls applied to valuation processes and workout agreements are the same for credit products measured at amortized cost and fair value. Our workout strategy and estimation of recoverable amounts are independently approved in accordance with our credit authorities. ▲

### Collective impairment assessment

**Audited I** We assess our portfolios of claims carried at amortized cost with similar credit risk characteristics for collective impairment in order to consider if these portfolios contain impaired claims that cannot yet be individually identified. To cover the time lag between the occurrence of an impairment event and its identification based on the policies above, we establish collective loan loss allowances based on the estimated loss for the portfolio over the average period between trigger events and the identification of any individual impairment. These portfolios are not considered impaired loans in the tables shown in this section.

Additionally, for all of our portfolios we assess whether there have been any developments that might result in event-driven impairments that are not immediately observable. These events could be stress situations, such as a natural disaster or a country crisis, or they could result from significant changes in the legal or regulatory environment. To determine whether a collective impairment exists, we regularly use a set of global economic drivers to assess the most vulnerable countries and review the impact of any potential impairment event. ▲

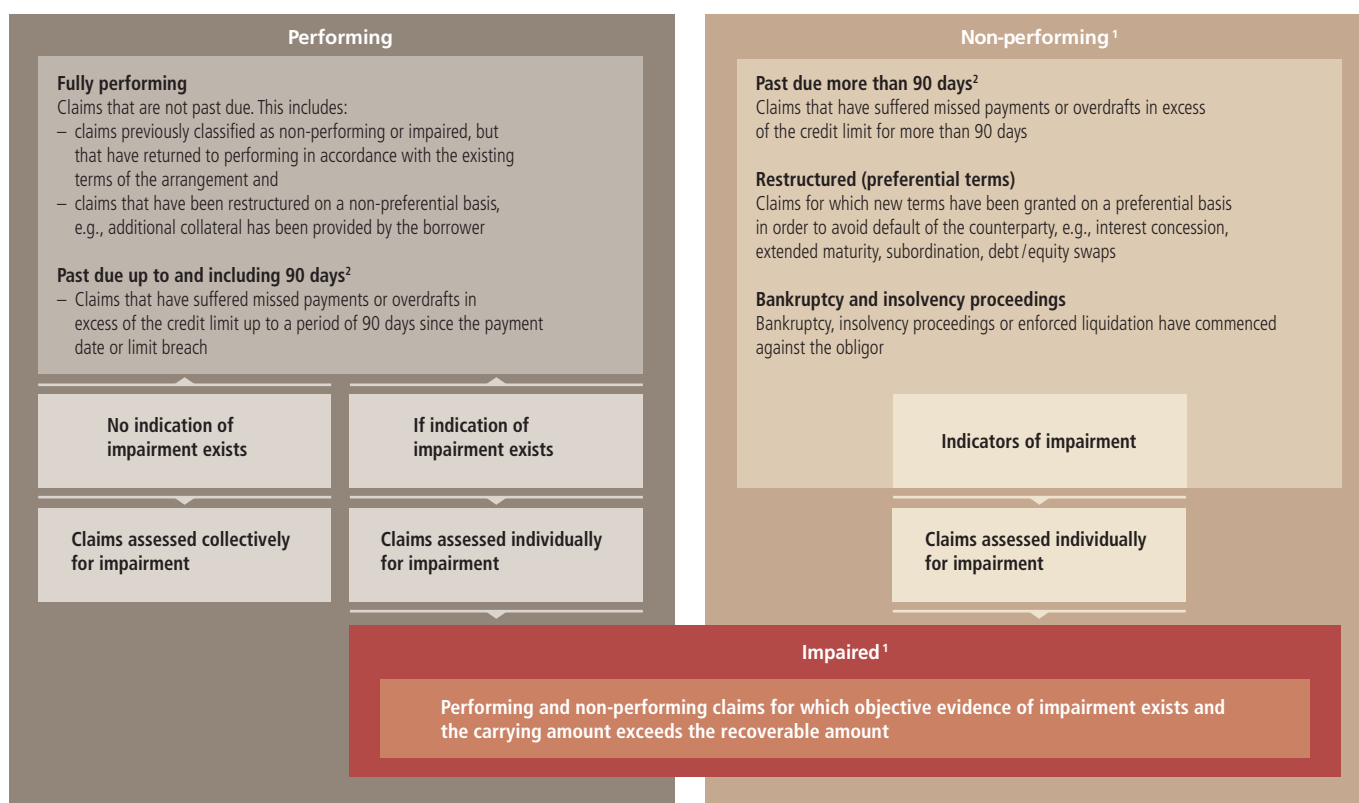
### Recognition of impairment

**Audited I** The recognition of impairment in our financial statements depends on the accounting treatment of the claim. For claims carried at amortized cost, impairment is recognized through the creation of an allowance, or in the case of off-balance sheet items such as financial guarantees and certain loan commitments through a provision, both charged to the income statement as a credit loss expense.

For claims measured at fair value, a deterioration of the credit quality is recognized as a CVA in the income statement in *Net trading income*. ▲

→ Refer to "Note 1 Summary of significant accounting policies," "Note 11 Allowances and provisions for credit losses" and "Note 22d Valuation adjustments" in the "Consolidated financial statements" section of this report for more information

## Exposure categorization



<sup>1</sup> Claims rated as in default. All such claims are excluded from collective impairment assessment. <sup>2</sup> 180 days for certain specified retail portfolios.

## Impaired financial instruments

**Audited |** The following tables show impaired financial instruments, comprising loans, guarantees and loan commitments, and SFTs. As of 31 December 2017, gross impaired financial instruments stood at CHF 1.3 billion compared with CHF 1.2 billion as of 31 December 2016. After deducting the estimated liquidation proceeds of collateral and specific allowances and provisions, net impaired financial instruments were CHF 0.3 billion compared with CHF 0.4 billion. ▲

- Refer to the “Investment Bank, Non-core and Legacy Portfolio and Group ALM: distribution of net OTC derivatives and SFT exposure across internal UBS ratings and loss given default (LGD) buckets” table in this section for OTC derivative exposures in the Investment Bank and Corporate Center – Non-core and Legacy Portfolio that are rated at level 13 or in default according to our internal rating scale
- Refer to “Note 11 Allowances and provisions for credit losses” in the “Consolidated financial statements” section of this report for more information on movements in allowances and provisions

### Impaired loans

During 2017, gross impaired loans (including amounts due from banks) increased to CHF 1,076 million from CHF 975 million. The majority of this exposure relates to loans in our Swiss domestic business. The ratio of impaired loans to total loans remained at 0.3%.

**Audited |**

### Impaired financial instruments by type

CHF million	Gross impaired financial instruments		Allowances and provisions		Estimated liquidation proceeds of collateral <sup>1</sup>		Net impaired financial instruments	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Loans (including amounts due from banks)	1,076	975	(661)	(599)	(206)	(161)	210	215
Guarantees and loan commitments	199	260	(33)	(54)	(5)	(10)	161	195
<b>Total impaired financial instruments</b>	<b>1,275<sup>2</sup></b>	1,235	<b>(694)<sup>2</sup></b>	(653)	<b>(210)</b>	(171)	<b>371</b>	411

<sup>1</sup> Does not include oil and gas reserves related to reserve-based lending. <sup>2</sup> Includes CHF 13 million in collective loan loss allowances (31 December 2016: CHF 12 million). Does not include exposures within Other assets of CHF 352 million, with associated allowances of CHF 19 million. ▲

### Loss history statistics

CHF million, except where indicated	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
Due from banks and loans (gross)	333,967	320,080	324,594	329,800	301,601
Impaired loans (including due from banks)	1,076	975	1,226	1,204	1,241
Non-performing loans (including due from banks)	2,095	2,399	1,630	1,602	1,582
Allowances and provisions for credit losses <sup>2</sup>	694	653	727	735	750
of which: allowances for due from banks and loans <sup>1</sup>	661	599	692	708	686
Net write-offs <sup>3</sup>	98	123	116	124	83
of which: net write-offs for due from banks and loans	98	123	116	124	83
Credit loss (expense) / recovery <sup>4</sup>	(128)	(37)	(117)	(78)	(50)
<b>Ratios</b>					
Impaired loans as a percentage of due from banks and loans (gross)	0.3	0.3	0.4	0.4	0.4
Non-performing loans as a percentage of due from banks and loans (gross)	0.6	0.7	0.5	0.5	0.5
Allowances as a percentage of due from banks and loans (gross)	0.2	0.2	0.2	0.2	0.2
Net write-offs as a percentage of average due from banks and loans (gross) outstanding during the period	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> Includes collective loan loss allowances. Does not include allowances for other receivables for an amount of CHF 19 million (31 December 2016: CHF 0 million, 31 December 2015: CHF 0 million, 31 December 2014: CHF 0 million, 31 December 2013: CHF 0 million). <sup>2</sup> Includes provisions for loan commitments and allowances for securities financing transactions. <sup>3</sup> Includes net write-offs for loan commitments and securities financing transactions. <sup>4</sup> Includes credit loss (expense) / recovery for loan commitments, guarantees and securities financing transactions.

**Audited |** Collateral held against our impaired loan exposure mainly consisted of real estate and securities. It is our policy to dispose of foreclosed real estate as soon as practicable. The carrying amount of foreclosed property recorded in our balance sheet at the end of 2017 and 2016 amounted to CHF 60 million and CHF 51 million, respectively. We seek to liquidate collateral held in the form of financial assets expeditiously and at prices considered fair. This may require us to purchase assets for our own account, where permitted by law, pending orderly liquidation. ▲

Specific and collective allowances and provisions for credit losses increased by CHF 41 million to CHF 694 million as of 31 December 2017. This includes collective loan loss allowances of CHF 13 million, broadly unchanged from the prior year.

The “Loss history statistics” table below provides a five-year history of our credit loss experience for loans (including due from banks) relative to our impaired and non-performing loans.

- Refer to “Policies for past due, non-performing and impaired claims” in this section, and to “Note 10 Due from banks and loans (held at amortized cost)” and “Note 11 Allowances and provisions for credit losses” in the “Consolidated financial statements” section of this report for more information

## Allowances and provisions for credit losses

CHF million, except where indicated	IFRS exposure, gross <sup>1</sup>		Impaired exposure, gross		Estimated liquidation proceeds of collateral <sup>2</sup>		Allowances and provisions for credit losses <sup>3</sup>		Impairment ratio (%)	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Group</b>										
Balances with central banks	87,078	107,100								
Due from banks	13,741	13,159	3	3			3	3	0.0	0.0
Loans	320,225	306,921	1,074	972	206	161	658	596	0.3	0.3
Guarantees	18,854	16,711	168	202	4	7	13	8	0.9	1.2
Loan commitments	39,069	54,430	31	58	1	3	20	47	0.1	0.1
<b>Total</b>	<b>478,967<sup>4,5</sup></b>	<b>498,322</b>	<b>1,275</b>	<b>1,235</b>	<b>210</b>	<b>171</b>	<b>694<sup>5</sup></b>	<b>653</b>	<b>0.3</b>	<b>0.2</b>
<b>Wealth Management</b>										
Balances with central banks	427	901								
Due from banks	1,356	915								
Loans	115,180	101,876	160 <sup>6</sup>	77	45	13	104 <sup>6</sup>	61	0.1	0.1
Guarantees	1,982	2,187					1	1		
Loan commitments	1,861	1,730								
<b>Total</b>	<b>120,806</b>	<b>107,608</b>	<b>160<sup>6</sup></b>	<b>77</b>	<b>45</b>	<b>13</b>	<b>105<sup>6</sup></b>	<b>62</b>	<b>0.1</b>	<b>0.1</b>
<b>Wealth Management Americas</b>										
Balances with central banks	0	0								
Due from banks	3,357	2,635								
Loans	53,014	52,486	22	27			26	29	0.0	0.1
Guarantees	460	558								
Loan commitments	347	375								
<b>Total</b>	<b>57,178</b>	<b>56,054</b>	<b>22</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>29</b>	<b>0.0</b>	<b>0.0</b>
<b>Personal &amp; Corporate Banking</b>										
Balances with central banks	0	0								
Due from banks	1,485	2,156	3	3			3	3	0.2	0.1
Loans	131,380	133,861	733	756	113	121	441	443	0.6	0.6
Guarantees	9,551	9,023	158	202	4	7	12	7	1.7	2.2
Loan commitments	9,160	8,861	12	35	1	3	16	34	0.1	0.4
<b>Total</b>	<b>151,576</b>	<b>153,900</b>	<b>906</b>	<b>995</b>	<b>118</b>	<b>131</b>	<b>472</b>	<b>486</b>	<b>0.6</b>	<b>0.6</b>
<b>Asset Management</b>										
<b>Total</b>	<b>570</b>	<b>545</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
<b>Investment Bank</b>										
Balances with central banks	32	37								
Due from banks	3,855	4,234								
Loans	11,165	10,086	110	95	47	27	57	48	1.0	0.9
Guarantees	6,739	4,790	10	0					0.1	0.0
Loan commitments	27,700	42,937	19	23			4	13	0.1	0.1
<b>Total</b>	<b>49,491<sup>5</sup></b>	<b>62,085</b>	<b>139</b>	<b>118</b>	<b>47</b>	<b>27</b>	<b>61<sup>5</sup></b>	<b>61</b>	<b>0.3</b>	<b>0.2</b>
<b>CC – Services</b>										
<b>Total</b>	<b>496</b>	<b>610</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
<b>CC – Group ALM</b>										
Balances with central banks	86,618	106,162								
Due from banks	2,740	2,176								
Loans	7,226	5,962								
Guarantees	2	1								
Loan commitments	0	0								
<b>Total</b>	<b>96,585</b>	<b>114,301</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
<b>CC – Non-core and Legacy Portfolio</b>										
Balances with central banks	0	0								
Due from banks	22	43								
Loans	2,226	2,606	48	17			29	15	2.1	0.6
Guarantees	16	41								
Loan commitments	0	527								
<b>Total</b>	<b>2,264<sup>5</sup></b>	<b>3,218</b>	<b>48</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>29<sup>5</sup></b>	<b>15</b>	<b>2.1</b>	<b>0.5</b>

<sup>1</sup> The measurement requirements of IFRS differ in certain respects from our internal management view of credit risk. <sup>2</sup> Does not include oil and gas reserves related to reserve-based lending. <sup>3</sup> Includes CHF 13 million (31 December 2016: CHF 12 million) in collective loan loss allowances for credit losses. <sup>4</sup> As of 31 December 2017, total IFRS exposure of UBS AG consolidated was CHF 2.1 billion higher than the exposure of UBS Group AG consolidated, related to receivables of UBS AG and UBS Switzerland AG against UBS Group AG (31 December 2016: CHF 0.6 billion). <sup>5</sup> Does not include exposures within Other assets of CHF 352 million, of which CHF 347 million were in Corporate Center – Non-core and Legacy Portfolio and CHF 5 million were in the Investment Bank, with associated allowances of CHF 19 million, of which CHF 14 million were in Corporate Center – Non-core and Legacy Portfolio and CHF 5 million were in the Investment Bank. <sup>6</sup> The increase in impaired exposure and allowances relates mainly to a margin loan to a single client originated by Wealth Management and risk-managed by the Investment Bank.

## Development of individually impaired loans (including due from banks)

CHF million	For the year ended	
	31.12.17	31.12.16
<b>Balance at the beginning of the year</b>	<b>975</b>	1,226
New impaired loans	448	356
Increase in existing impaired loans	102	140
Repayments / sales / upgrades	(328)	(605)
Write-offs	(115) <sup>1</sup>	(143) <sup>1</sup>
Foreign currency translations effects	(5)	1
<b>Balance at the end of the year</b>	<b>1,076</b>	975

<sup>1</sup> Does not include CHF 2 million in write-offs charged directly to collective loan loss allowances (31 December 2016: CHF 2 million).

### Past due but not impaired loans

The table below shows a breakdown of total loan balances where payments have been missed, but that we do not consider impaired because we otherwise expect to collect all amounts due under the contractual terms of the loans or the equivalent value from liquidation of collateral. The loan balances in the table arise predominantly within Personal & Corporate Banking and, to a lesser extent, Wealth Management.

The amount of past due but not impaired mortgage loans was not significant compared with the overall size of the mortgage portfolio.

→ Refer to “Note 1 Summary of significant accounting policies” in the “Consolidated financial statements” section of this report for more information on our impairment policies

#### Audited I

### Past due but not impaired loans

CHF million	31.12.17	31.12.16
1–10 days	126	54
11–30 days	108	113
31–60 days	126	68
61–90 days	192	10
>90 days	507	641
<i>of which: mortgage loans</i>	<i>336<sup>1</sup></i>	<i>542<sup>1</sup></i>
<b>Total</b>	<b>1,059</b>	887

<sup>1</sup> Total mortgage loans IFRS carrying value was CHF 153,729 million (31 December 2016: CHF 153,006 million).

## Market risk

### Key developments

We continued to manage market risk to low levels during 2017. Average 1-day, 95% confidence level, management value-at-risk (VaR) was unchanged at CHF 11 million. With VaR at such low levels, we continue to see some volatility in the measure driven by positions arising from client facilitation as well as option expiries. The number of backtesting exceptions within a 250-business-day window decreased to one from seven by the end of the year. Accordingly, the FINMA VaR multiplier used to compute regulatory and stressed VaR RWA decreased to 3.00 from 3.65 as of 31 December 2017.

### Audited | Main sources of market risk

- Market risks arise from both our trading and non-trading business activities.
- Trading market risks arise mainly in connection with primary debt and equity underwriting, securities and derivatives trading for market-making and client facilitation within our Investment Bank, as well as the remaining positions within Non-core and Legacy Portfolio and our municipal securities trading business within Wealth Management Americas.
- Non-trading market risk arises predominantly in the form of interest rate and foreign exchange risks in connection with personal banking and lending in our wealth management businesses, our personal and corporate banking business in Switzerland and the Investment Bank's lending business, in addition to treasury activities.
- Corporate Center – Asset and Liability Management (Group ALM) assumes market risks in the process of managing interest rate risk, structural foreign exchange risk and the liquidity and funding profile (including high-quality liquid assets) of the Group.
- Equity and debt investments can also give rise to market risks, as can some aspects of our employee benefits, such as defined benefit pension schemes. ▲

### Audited | Overview of measurement, monitoring and management techniques

- Management VaR measures exposures under the market risk framework. This includes trading market risks and parts of non-trading market risks. Non-trading market risks not included in VaR are covered in the risks controlled by Treasury Risk Control as set out further below.
- Market risk limits are set for the Group, the business divisions and Corporate Center units and at granular levels within the various business lines, reflecting the nature and magnitude of the market risks.
- Our primary portfolio measures of market risk are liquidity-adjusted stress (LAS) loss and value-at-risk (VaR). Both are

common to all our business divisions and subject to limits that are approved by the Board of Directors (BoD).

- These measures are complemented by concentration and granular limits for general and specific market risk factors. Our trading businesses are subject to multiple market risk limits. These limits take into account the extent of market liquidity and volatility, available operational capacity, valuation uncertainty and, for our single-name exposures, the credit quality of issuers.
- Trading market risks are managed on an integrated basis at a portfolio level. As risk factor sensitivities change due to new transactions, transaction expiries or changes in market levels, risk factors are dynamically rehedge to remain within limits. Accordingly, in the trading portfolio, we do not generally seek to distinguish between specific positions and associated hedges.
- Issuer risk is controlled by limits applied at the business division level based on jump-to-zero measures, which estimate our maximum default exposure (the loss in the case of a default event assuming zero recovery).
- Non-trading foreign exchange risks are managed under market risk limits, with the exception of Corporate Center – Group ALM's management of consolidated capital activity.

Our Treasury Risk Control function applies a holistic risk framework, which sets the appetite for treasury-related risk-taking activities across the Group. A key element of the framework is an overarching economic value sensitivity limit, set by the BoD. This limit is linked to the level of Basel III common equity tier 1 (CET1) capital and takes into account risks arising from interest rates, foreign exchange and credit spreads. In addition, the sensitivity of net interest income to changes in interest rates is monitored against targets set by the Group Chief Executive Officer, in order to analyze the outlook and volatility of net interest income based on market-expected interest rates. Limits are also set by the BoD to balance the impact of foreign exchange movements on our CET1 capital and CET1 capital ratio. Non-trading interest rate and foreign exchange risks are included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework.

Equity and debt investments are subject to a range of risk controls, including preapproval of new investments by business management and Risk Control and regular monitoring and reporting. They are also included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework. ▲

- Refer to the "Treasury management" section of this report for more information on Corporate Center – Group ALM's management of foreign exchange risks
- Refer to the "Capital management" section of this report for more information on the sensitivity of our CET1 capital and CET1 capital ratio to currency movements

## Market risk stress loss

In addition to VaR, which is discussed below, we measure and manage our market risks through a comprehensive framework of non-statistical measures and related limits. This includes an extensive series of stress tests and scenario analyses, which we continuously evaluate with the intention of ensuring that any losses resulting from an extreme, yet plausible event do not exceed our risk appetite.

### Liquidity-adjusted stress

Our primary measure of stress loss for Group-wide market risk is LAS. The LAS framework is designed to capture the economic losses that could arise under specified stress scenarios. This is in part achieved by replacing the standard one-day and 10-day holding period assumptions used for management and regulatory VaR with liquidity-adjusted holding periods, as explained below. Shocks are then applied to positions based on the expected market movements over the liquidity-adjusted holding periods resulting from the specified scenario.

The holding periods used in LAS are calibrated to reflect the amount of time it would take to reduce or hedge the risk of positions in each major risk factor in a stressed environment, assuming maximum utilization of the relevant position limits. We also apply minimum holding periods, regardless of observed liquidity levels, reflecting the fact that identification of and reaction to a crisis may not always be immediate.

The expected market movements are derived using a combination of historical market behavior, based on an analysis of historical events, and forward-looking analysis that includes consideration of defined scenarios that have not occurred historically.

LAS-based limits are applied at a number of levels: Group, business division and Corporate Center unit, business area and sub-portfolio. In addition, LAS forms the core market risk component of our combined stress test framework and is therefore integral to our overall risk appetite framework.

→ Refer to “Risk appetite framework” in this section for more information

→ Refer to “Stress testing” in this section for more information on our stress testing framework

## Value-at-risk

### VaR definition

**Audited I** VaR is a statistical measure of market risk, representing the market risk losses that could potentially be realized over a set time horizon (holding period) at an established level of confidence. The measure assumes no change in the Group’s trading positions over the set time horizon.

We calculate VaR on a daily basis. The profit or loss distribution from which VaR is derived is constructed by our internally developed VaR model. The VaR model simulates returns over the holding period of those risk factors to which our trading positions are sensitive, and subsequently quantifies the profit or loss impact of these risk factor returns on the trading positions. Risk factor returns associated with the risk factor classes of general interest rates, foreign exchange and commodities are based on a pure historical simulation approach, taking into account a five-year look-back window. Risk factor returns for selected issuer-based risk factors, such as equity price and credit spreads, are decomposed into systematic and residual, issuer-specific components using a factor model approach. Systematic returns are based on historical simulation, and residual returns are based on a Monte Carlo simulation. The VaR model profit and loss distribution is derived from the sum of the systematic and the residual returns in such a way that we consistently capture systematic and residual risk. Correlations among risk factors are implicitly captured via the historical simulation approach. In modeling the risk factor returns, we consider the stationarity properties of the historical time series of risk factor changes. Depending on the stationarity properties of the risk factors within a given risk factor class, we choose to model the risk factor returns using absolute returns or logarithmic returns. The risk factor return distributions are updated on a fortnightly basis.

Although our VaR model does not have full revaluation capability, we source full revaluation grids and sensitivities from our front-office systems, enabling us to capture material non-linear profit or loss effects.

We use a single VaR model for both internal management purposes and determining market risk regulatory capital requirements, although we consider different confidence levels and time horizons. For internal management purposes, we establish risk limits and measure exposures using VaR at the 95% confidence level with a one-day holding period, aligned to the way we consider the risks associated with our trading activities. The regulatory measure of market risk used to underpin the market risk capital requirement under Basel III requires a measure equivalent to a 99% confidence level using a 10-day holding period. In the calculation of a 10-day holding period VaR, we employ 10-day risk factor returns, whereby all observations are equally weighted.

Additionally, the population of the portfolio within management and regulatory VaR is slightly different. The population within regulatory VaR meets regulatory requirements for inclusion in regulatory VaR. Management VaR includes a broader population of positions. For example, regulatory VaR excludes the credit spread risks from the securitization portfolio, which are treated instead under the securitization approach for regulatory purposes.

We also use stressed VaR (SVaR) for the calculation of regulatory capital. SVaR adopts broadly the same methodology as regulatory VaR and is calculated using the same population, holding period (10-day) and confidence level (99%). However, unlike regulatory VaR, the historical data set for SVaR is not limited to five years, but spans the time period from 1 January 2007 to the present. In deriving SVaR, we search for the largest 10-day holding period VaR for the current portfolio of the Group across all one-year look-back windows that fall into the interval from 1 January 2007 to the present. SVaR is computed weekly. ▲

→ Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on the regulatory capital calculation under the advanced internal ratings-based approach

### Management VaR for the period

The tables below show minimum, maximum, average and period-end management VaR by business division and Corporate Center unit, and by general market risk type. We continued to manage management VaR at low levels with average VaR remaining stable compared with year-end 2016.

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### Management value-at-risk (1-day, 95% confidence, 5 years of historical data) by business division and Corporate Center unit and general market risk type<sup>1</sup>

		For the year ended 31.12.17								
CHF million						Equity	Interest rates	Credit spreads	Foreign exchange	Commodities
		Min.				1	6	4	1	0
		Max.				14	12	8	5	6
		Average				6	9	6	2	2
		31.12.17				4	8	8	3	2
<b>Total management VaR, Group</b>	<b>5</b>	<b>18</b>	<b>11</b>	<b>10</b>	<i>Average (per business division and risk type)</i>					
Wealth Management	0	0	0	0	0	0	0	0	0	
Wealth Management Americas	0	1	1	1	0	1	1	0	0	
Personal & Corporate Banking	0	0	0	0	0	0	0	0	0	
Asset Management	0	0	0	0	0	0	0	0	0	
Investment Bank	4	17	9	8	6	7	5	2	2	
CC – Services	0	0	0	0	0	0	0	0	0	
CC – Group ALM	3	8	6	4	0	5	2	1	0	
CC – Non-core and Legacy Portfolio	3	5	3	3	1	2	2	0	0	
Diversification effect <sup>2,3</sup>			(8)	(6)	(1)	(6)	(4)	(1)	0	

		For the year ended 31.12.16								
CHF million						Equity	Interest rates	Credit spreads	Foreign exchange	Commodities
		Min.				1	9	3	1	0
		Max.				15	15	6	5	2
		Average				5	11	4	3	1
		31.12.16				4	11	5	2	1
<b>Total management VaR, Group</b>	<b>8</b>	<b>18</b>	<b>11</b>	<b>11</b>	<i>Average (per business division and risk type)</i>					
Wealth Management	0	0	0	0	0	0	0	0	0	
Wealth Management Americas	0	1	0	1	0	1	1	0	0	
Personal & Corporate Banking	0	0	0	0	0	0	0	0	0	
Asset Management	0	0	0	0	0	0	0	0	0	
Investment Bank	5	18	9	8	5	8	3	3	1	
CC – Services	0	0	0	0	0	0	0	0	0	
CC – Group ALM	5	9	7	6	0	7	1	1	0	
CC – Non-core and Legacy Portfolio	3	5	4	4	0	4	2	1	0	
Diversification effect <sup>2,3</sup>			(10)	(8)	0	(9)	(3)	(1)	0	

<sup>1</sup> Statistics at individual levels may not be summed to deduce the corresponding aggregate figures. The minima and maxima for each level may well occur on different days, and likewise, the VaR for each business line or risk type, being driven by the extreme loss tail of the corresponding distribution of simulated profits and losses for that business line or risk type, may well be driven by different days in the historical time series, rendering invalid the simple summation of figures to arrive at the aggregate total. <sup>2</sup> Difference between the sum of the standalone VaR for the business divisions and Corporate Center units and the VaR for the Group as a whole. <sup>3</sup> As the minimum and maximum occur on different days for different business divisions and Corporate Center, it is not meaningful to calculate a portfolio diversification effect. ▲



### VaR limitations

**Audited I** Actual realized market risk losses may differ from those implied by our VaR for a variety of reasons.

- The VaR measure is calibrated to a specified level of confidence and may not indicate potential losses beyond this confidence level.
- The one-day time horizon used for VaR for internal management purposes, or 10-day in the case of the regulatory VaR measure, may not fully capture the market risk of positions that cannot be closed out or hedged within the specified period.
- In certain cases, VaR calculations approximate the impact of changes in risk factors on the values of positions and portfolios. This may happen because the number of risk factors included in the VaR model is necessarily limited.
- The effect of extreme market movements is subject to estimation errors, which may result from non-linear risk sensitivities, as well as the potential for actual volatility and correlation levels to differ from assumptions implicit in the VaR calculations.
- The use of a five-year window means that sudden increases in market volatility will tend not to increase VaR as quickly as the use of shorter historical observation periods, but the increase will affect our VaR for a longer period of time. Similarly, following a period of increased volatility, as markets stabilize, VaR predictions will remain more conservative for a period of time influenced by the length of the historical observation period.

SVaR is subject to the same limitations as noted for VaR above, but the use of one-year data sets avoids the smoothing effect of the five-year data set used for VaR, and the absence of the five-year window provides for a longer history of potential

loss events. Therefore, although the significant period of stress during the financial crisis of 2007–2009 is no longer contained in the historical five-year period used for management and regulatory VaR, SVaR will continue to use this data. This approach is intended to reduce the procyclicality of the regulatory capital requirements for market risks.

We recognize that no single measure may encompass the entirety of risks associated with a position or portfolio. Consequently, we employ a suite of various metrics with both overlapping and complementary characteristics in order to create a holistic framework that seeks to ensure material completeness of risk identification and measurement. As a statistical aggregate risk measure, VaR supplements our liquidity-adjusted stress and comprehensive stress testing frameworks.

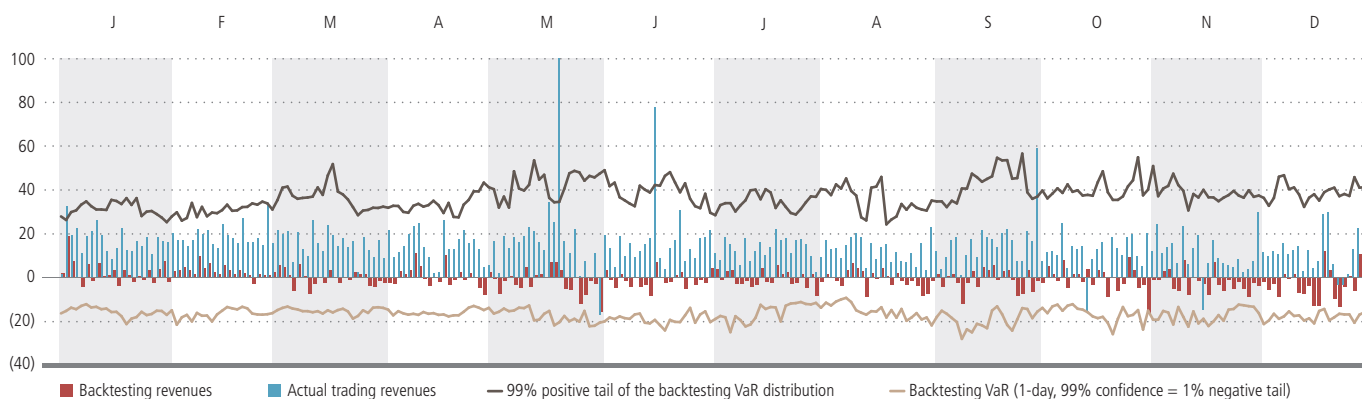
In the fourth quarter of 2017, we went live with a new framework to identify and quantify potential risks that are not fully captured by our VaR model. We refer to these risks as risks-not-in-VaR. This framework is used to underpin these potential risks with regulatory capital, calculated as a multiple of regulatory VaR and stressed VaR.▲

### Backtesting of VaR

For backtesting purposes, we compute backtesting VaR using a 99% confidence level and one-day holding period for the population included within regulatory VaR. The backtesting process compares backtesting VaR calculated on positions at the close of each business day with the revenues generated by those positions on the following business day. Backtesting revenues exclude non-trading revenues, such as fees and commissions and revenues from intraday trading, to provide for a like-for-like comparison. A backtesting exception occurs when backtesting revenues are negative and the absolute value of those revenues is greater than the previous day's backtesting VaR.

### Group: development of backtesting revenues<sup>1</sup> and actual trading revenues<sup>2</sup> against backtesting VaR<sup>3</sup> (1-day, 99% confidence)

CHF million



<sup>1</sup> Excludes non-trading revenues, such as commissions and fees, and revenues from intraday trading. <sup>2</sup> Includes backtesting revenues and revenues from intraday trading. <sup>3</sup> Based on Basel III regulatory VaR, excludes CVA positions and their eligible hedges, which are subject to the new standalone CVA charge.

Statistically, given the confidence level of 99%, two or three backtesting exceptions per year can be expected. More exceptions than this could indicate that the VaR model is not performing appropriately, as could too few exceptions over a prolonged period of time. However, as noted in the VaR limitations above, a sudden increase or decrease in market volatility relative to the five-year window could lead to a higher or lower number of exceptions, respectively. Accordingly, Group-level backtesting exceptions are investigated, as are exceptional positive backtesting revenues, with results being reported to senior business management, the Group Chief Risk Officer and the divisional Chief Risk Officers. Backtesting exceptions are also reported to internal and external auditors and to the relevant regulators.

The "Group: development of backtesting revenues and actual trading revenues against backtesting VaR" chart on the previous page shows the 12-month development of backtesting VaR against the Group's backtesting revenues and actual trading revenues for 2017. The chart shows both the negative and positive tails of the backtesting VaR distribution at 99% confidence intervals representing, respectively, the losses and gains that could potentially be realized over a one-day period at that level of confidence. The asymmetry between the negative and positive tails is due to the long gamma risk profile that has been run historically in the Investment Bank. This long gamma position profits from increases in volatility, which therefore benefits the positive tail of the VaR simulated profit or loss distribution.

The actual trading revenues include, in addition to backtesting revenues, intraday revenues.

The number of negative backtesting exceptions within a 250-business-day window decreased to one from seven by the end of the year. Accordingly, the FINMA VaR multiplier used to compute regulatory and stressed VaR RWA decreased to 3.00 from 3.65 as of 31 December 2017.

#### VaR model confirmation

In addition to model backtesting performed for regulatory purposes as described above, we also conduct extended backtesting for our internal model confirmation purposes. This includes observing model performance across the entire profit or loss distribution, not just the tails, and at multiple levels within the business division and Corporate Center unit hierarchies.

→ **Refer to "Risk measurement" in this section for more information on our approach to model confirmation procedures**

#### VaR model developments in 2017

**Audited |** We have not made any material changes to the VaR model in 2017. ▲

#### Future market risk-related regulatory capital developments

In December 2017, the Basel Committee on Banking Supervision extended the implementation date of the revised minimum capital requirements for market risk to 1 January 2022. The extension aligns implementation with the Basel III revisions to credit risk and operational risk and recognizes that some of the market risk-related rules are still being finalized by the Basel Committee.

Key elements of the revised market risk framework include: (i) changes to the internal model-based approach, including changes to the model approval and performance measurement process; (ii) changes to the standardized approach with the aim of it being a credible fallback method for an internal model-based approach; and (iii) a revised boundary between trading book and banking book. UBS maintains a close dialog with FINMA to discuss in more detail the implementation objectives and to ensure a smooth transition of the capital regime for market risk.

- **Refer to "Capital management objectives, planning and activities" in the "Capital management" section of this report for more information on the development of RWA**
- **Refer to "Risk measurement" in this section for more information on our approach to model confirmation procedures**
- **Refer to the "Regulatory and legal developments" and "Risk factors" sections of this report for more information**

## Interest rate risk in the banking book

### Sources of interest rate risk in the banking book

**Audited I** Interest rate risk in the banking book arises from balance sheet positions such as *Loans, Due from customers, Debt issued, Financial assets available for sale, Financial assets held to maturity*, certain *Financial assets* and *liabilities designated at fair value*, derivatives measured at fair value, including derivatives used for cash flow hedge accounting purposes, as well as related funding transactions. These positions may impact *Other comprehensive income* (OCI) or the income statement, depending on their accounting treatment.

Our largest banking book interest rate exposures arise from client deposits and lending products in our wealth management businesses and Personal & Corporate Banking. For Wealth Management and Personal & Corporate Banking, the inherent interest rate risks are transferred either by means of back-to-back transactions or, in the case of products with no contractual maturity date or direct market-linked rate, by replicating portfolios from the originating business into Corporate Center – Group ALM, which manages the risks on an integrated basis, allowing for netting interest rate risks across different sources. Any residual interest rate risks in our wealth management businesses and Personal & Corporate Banking that are not transferred to Corporate Center – Group ALM are managed locally and are subject to independent monitoring and control by local risk control units as well as centrally by Market Risk Control. To manage the interest rate risk centrally, Corporate Center – Group ALM uses derivative instruments, most of which are in designated hedge accounting relationships. A significant amount of interest rate risk also arises from Corporate Center –

Group ALM financing and investing activities, such as the investment and refinancing of non-monetary corporate balance sheet items with indefinite maturities, including equity, goodwill and real estate. For these items, senior management has defined specific target durations as a basis for our funding and investment activities, as applicable. These targets are defined by replication portfolios, which establish rolling benchmarks to execute against. As of 31 December 2017, the target replication portfolios for equity, goodwill and real estate were defined as follows: in Swiss francs with an average duration of approximately two years and fair value sensitivity of CHF 5 million per basis point; in US dollars with an average duration of approximately five years and a sensitivity of CHF 11 million per basis point. Corporate Center – Group ALM also maintains a portfolio of debt investments to meet the Group's liquidity needs.

Interest rate risk within Wealth Management Americas arises from the business division's portfolio of available-for-sale assets, in addition to its lending and deposit products offered to clients. This interest rate risk is closely measured, monitored and managed within approved risk limits and controls, taking into account Wealth Management Americas' balance sheet items that mutually offset interest rate risk.

Banking book interest rate exposure in the Investment Bank arises predominantly from the business of Corporate Client Solutions, where transactions are subject to approval on a case-by-case basis.

Corporate Center – Non-core and Legacy Portfolio assets that are classified as loans and receivables, and certain other debt securities held as loans and receivables, also give rise to non-trading interest rate risk. ▲

### Effect of interest rate changes on shareholders' equity and CET1 capital

The "Accounting and capital effect of changes in interest rates" table below illustrates the accounting and CET1 capital treatment of gains and losses resulting from changes in interest rates. For instruments held at fair value, a change in interest rates results in an immediate fair value gain or loss recognized either in the income statement or through OCI. For assets and liabilities held at amortized cost, including financial assets held to maturity, a change in interest rates does not result in a change in the carrying amount of the instruments, but could affect the amount of interest income or expense recognized over time in the income statement.

Typically, increases in interest rates would lead to an immediate reduction in the value of our longer-term assets held at fair value, but we would expect this to be offset over time through higher net interest income (NII) on our core banking products.

In addition to the differing accounting treatments, our banking book positions have different sensitivities to different points on yield curves. For example, our portfolios of debt securities, whether accounted for as instruments designated at fair value, as assets held to maturity or as assets available for sale, and interest rate swaps designated as cash flow hedges, on the whole, are more sensitive to changes in longer-duration interest rates, whereas our deposits and a significant portion of our loans contributing to net interest income are more sensitive to short-term rates. These factors are important as yield curves

may not shift on a parallel basis and could, for example, exhibit an initial steepening, followed by a flattening over time.

By virtue of the accounting treatment and yield curve sensitivities outlined above, in a steepening yield curve scenario we would expect to recognize an initial decrease in shareholders' equity as a result of fair value losses recognized in OCI. This would be compensated over time by increased NII once increases in interest rates affect the shorter end of the yield curve in particular. The effect on CET1 capital would be less pronounced, as gains and losses on interest rate swaps designated as cash flow hedges are not recognized for regulatory capital purposes. Fair value losses on instruments designated at fair value are expected to be offset by economic hedges.

We subject the interest rate-sensitive banking book exposures to a suite of interest rate scenarios in order to assess the effect on expected NII over both a one-year and a three-year time horizon assuming constant business volumes. We also consider the effect of the interest rate movements in each scenario on the fair value recognized in OCI of financial assets available for sale and cash flow hedges managed by Corporate Center – Group ALM. The scenario assessment also includes the estimated effect through OCI on shareholders' equity and CET1 capital from pension fund assets and liabilities. While certain standard scenarios, such as a parallel rise in all yield curves of 100 basis points, are retained and regularly used, other scenarios are adopted as a function of changing market conditions.

### Accounting and capital effect of changes in interest rates<sup>1</sup>

	Recognition		Shareholders' equity		CET1 capital	
	Timing	Income statement / OCI	Gains	Losses	Gains	Losses
Financial assets available for sale	Immediate	OCI	●	●		●
Derivatives transacted as economic hedges	Immediate	Income statement	●	●	●	●
Derivatives designated as cash flow hedges	Immediate	OCI <sup>2</sup>	●	●		
Loans and deposits at amortized costs <sup>3</sup>	Gradual	Income statement	●	●	●	●
Financial assets designated at fair value	Immediate	Income statement	●	●	●	●
Financial assets held to maturity <sup>3</sup>	Gradual	Income statement	●	●	●	●

<sup>1</sup> Refer to the "Reconciliation of IFRS equity to Swiss SRB common equity tier 1 capital" table in the "Capital management" section of this report for more information on the differences between shareholders' equity and CET1 capital. <sup>2</sup> Excluding hedge ineffectiveness that is recognized in the income statement in accordance with IFRS. <sup>3</sup> For fixed-rate financial instruments, changes in interest rates impact the income statement when these instruments roll over and reprice.

At the end of 2017, the following scenarios were analyzed in detail:

- Negative Interest Rates (NIR) then Recovery: Yield curves drop 50 basis points in parallel with no zero-floor applied and therefore can become negative, or more negative. Thereafter, all rates recover according to market-implied forward rates.
- NIR then Constant: Same assumptions as the NIR then Recovery scenario, but after the initial shock, rates do not recover but remain at the then-prevailing levels until the end of the simulated time horizon.
- Global Interest Rate Steepener: Represents a sudden shift in market sentiment causing a disorderly sell-off in long-dated bonds and a rapid steepening of the yield curve, exacerbated by the lack of liquidity in financial markets. This corresponds to the general interest rate movements contained in the corresponding CST scenario described in “Stress testing” in this section.
- Parallel +100 basis points: All yield curves rise 100 basis points in parallel.
- Severe Eurozone Crisis: This scenario assumes a eurozone crisis at its core and includes sovereign debt restructuring as a consequence of the ensuing crisis. A China hard landing is also a feature of the scenario. This corresponds to the general interest rate movements contained in the binding stress scenario in our CST framework for 2018 described in “Stress testing” in this section.
- Inverted Steepener: Yield curves across all currencies undergo a sharp rise for short tenors, with only a modest rise in the long end of the yield curve: +200 basis points for tenors up to 1 year, +100 basis points for the 5-year tenor and +20 basis points for 8-year to 10-year tenors.
- Constant Rates: All rates stay at current levels.

The results are compared with a baseline NII, which is calculated assuming that interest rates in all currencies develop according to their market-implied forward rates and under the assumption of constant business volumes and no specific management actions. The calculated effects on baseline NII range between a deterioration of approximately 6% and 9% over a one-year and three-year horizon, respectively, and an improvement of approximately 27% and 52% over a one-year and a three-year horizon, respectively. The most adverse scenario is the Negative Interest Rates then Constant over both a one-year horizon and three-year horizon. The most beneficial scenario is the Inverted Steepener over a one-year horizon and the Global Interest Rate Steepener over a three-year horizon.

In addition to the above scenario analysis, we also monitor the sensitivity of the NII to immediate parallel shocks of –200

and +200 basis points compared with baseline NII, under the assumption of a constant balance sheet volume and structure. Any resulting reduction in first-year NII relative to the baseline NII is subject to predefined threshold levels to monitor the extent to which the NII is exposed to an adverse movement in market rates. As of 31 December 2017, the baseline NII would have been approximately 17% less under a parallel shock of –200 basis points, whereas under a parallel +200-basis-point shock, the baseline NII would have been approximately 29% higher.

To shelter the level of our NII from the persistently low and negative interest rate environment in Swiss francs in particular, we rely on self-funding of our lending businesses through our deposit base in Wealth Management and Personal & Corporate Banking, along with appropriate additional adjustments to our interest rate-linked product pricing. Should we lose this equilibrium on the balance sheet, for example, due to unattractive pricing relative to our peers for either our mortgages or deposits, this could lead to a decrease in our NII in a persistently low and negative interest rate environment. As we assume constant business volumes, these risks do not appear in the aforementioned interest rate scenarios.

Moreover, should the low and negative interest rate environment persist or worsen, this could lead to additional pressure on our NII and we could face additional costs for holding our Swiss franc high-quality liquid asset portfolio. A reduction of the Swiss National Bank’s deposit exemption threshold for banks would also lead to increased costs that we might not be able to offset, for example, by passing on some of the costs to our depositors. Should euro interest rates also decline significantly further into negative territory, this could likewise increase our liquidity costs and put our NII generated from euro-denominated loans and deposits at risk of volume imbalances. Depending on the overall economic and market environment, sustained and significant negative rates could also lead to our Wealth Management and Personal & Corporate Banking clients paying down their loans together with reducing any excess cash they hold with us as deposits. This would reduce the underlying business volume and lower our NII accordingly.

A net decrease in deposits would require replacement funding at a potential relative cost increase that would depend on various factors, including the term and nature of the replacement funding, whether such funding is raised in the wholesale markets or from swapping with available funding denominated in another currency. On the other hand, imbalances leading to an excess deposit position could require additional investments at negative yields, which we might not be able to compensate for sufficiently as a result of our excess deposit balance charging mechanisms.

### Interest rate risk sensitivity to parallel shifts in yield curves

**Audited I** Interest rate risk in the banking book is not underpinned for capital purposes, but is subject to a regulatory threshold. As of 31 December 2017, the economic-value effect of an adverse parallel shift in interest rates of  $\pm 200$  basis points on our banking book interest rate risk exposures was significantly below the threshold of 20% of eligible capital recommended by regulators.

The interest rate risk sensitivity figures presented in the "Interest rate sensitivity – banking book" table on the next page represent the effect of +1,  $\pm 100$  and  $\pm 200$ -basis-point parallel moves in yield curves on present values of future cash flows, irrespective of accounting treatment. For some portfolios, the +1-basis-point sensitivity has been estimated by dividing the +100-basis-point sensitivity by 100. In the prevailing negative interest rate environment for the Swiss franc in particular, and to a lesser extent for the euro and the Japanese yen, interest rates for Wealth Management and Personal & Corporate Banking client transactions are generally being floored at non-negative levels. Accordingly, for the purposes of this disclosure table, downward moves of 100 / 200 basis points are floored to ensure that the resulting shocked interest rates do not turn negative. The flooring results in non-linear sensitivity behavior.

The sensitivity of the banking book to rising rates was approximately nil compared with negative CHF 3.1 million per basis point at prior year-end. This was mainly due to increased sensitivity in Corporate Center – Group ALM, reduced negative sensitivity in Wealth Management Americas and, to a lesser extent, a change in the sensitivity in Corporate Center – Non-core and Legacy Portfolio from negative CHF 0.1 million per basis point to positive CHF 0.5 million per basis point. The increased sensitivity in Corporate Center – Group ALM was mainly due to adjustments leading to more-positive sensitivity to interest rates in Swiss francs and a reduction of negative sensitivity in US dollar interest rates. The reduction in negative interest rate sensitivity within Wealth Management Americas

was primarily due to the introduction of a new deposit pricing approach, which resulted in higher deposit interest rate sensitivity, thus providing a larger offset to asset sensitivity. The change in Corporate Center – Non-core and Legacy Portfolio was due to improved capture of risk sensitivities of auction rate securities and auction preferred securities.

The sensitivity of the banking book to rising rates includes the interest rate sensitivities arising from debt investments classified as *Financial assets available for sale* and their associated hedges. The sensitivity of these positions (excluding hedges and excluding investments in funds accounted for as available for sale) to a 1-basis-point parallel increase in the yields of the respective instruments is approximately negative CHF 2 million, which would be recorded in OCI if such a change occurred. This sensitivity is around CHF 1 million per basis point less than as of 31 December 2016, mainly due to a further reduction in available-for-sale debt securities held in Corporate Center – Group ALM with an associated buildup of debt securities designated at fair value.

The sensitivity of the banking book to rising interest rates also includes interest rate sensitivities arising from interest rate swaps designated in cash flow hedges. Fair value gains or losses associated with the effective portion of these hedges are recognized initially in *Equity*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to profit or loss. These swaps are predominantly denominated in US dollars, euros, Swiss francs and British pounds. A 1-basis-point increase of underlying LIBOR curves would have decreased equity by approximately CHF 20 million, excluding adjustments for tax. ▲

- Refer to "Note 13 Financial assets available for sale and held to maturity" in the "Consolidated financial statements" section of this report for more information
- Refer to the "Group performance" section of this report for more information on sensitivity to interest rate movements

Audited I

## Interest rate sensitivity – banking book<sup>1</sup>

CHF million	31.12.17				
	-200 bps	-100 bps	+1 bp	+100 bps	+200 bps
CHF	(31.8)	(31.8)	1.0	97.7	191.2
EUR	(142.0)	(90.5)	0.2	15.2	31.1
GBP	(57.6)	(55.4)	0.1	11.2	21.3
USD	26.6	14.4	(1.3)	(135.1)	(280.6)
Other	4.4	0.8	0.0	5.0	10.3
<b>Total effect on fair value of interest rate-sensitive banking book positions</b>	<b>(200.4)</b>	<b>(162.5)</b>	<b>0.0</b>	<b>(6.0)</b>	<b>(26.7)</b>
<i>of which: Wealth Management Americas</i>	<i>144.8</i>	<i>59.1</i>	<i>(1.8)</i>	<i>(175.5)</i>	<i>(362.3)</i>
<i>of which: Investment Bank</i>	<i>32.9</i>	<i>18.3</i>	<i>(0.2)</i>	<i>(15.4)</i>	<i>(30.8)</i>
<i>of which: CC – Group ALM</i>	<i>(272.4)</i>	<i>(188.1)</i>	<i>1.4</i>	<i>138.6</i>	<i>279.8</i>
<i>of which: CC – Non-core and Legacy Portfolio</i>	<i>(106.2)</i>	<i>(52.1)</i>	<i>0.5</i>	<i>46.6</i>	<i>87.3</i>

CHF million	31.12.16				
	-200 bps	-100 bps	+1 bp	+100 bps	+200 bps
CHF	(13.0)	(13.0)	0.5	44.8	89.3
EUR	(109.0)	(91.9)	0.0	(2.5)	(2.6)
GBP	(184.5)	(103.0)	(0.1)	(9.9)	(27.7)
USD	823.2	358.9	(3.4)	(347.2)	(704.3)
Other	0.5	(1.7)	0.0	(3.3)	(6.3)
<b>Total effect on fair value of interest rate-sensitive banking book positions</b>	<b>517.1</b>	<b>149.4</b>	<b>(3.1)</b>	<b>(318.1)</b>	<b>(651.6)</b>
<i>of which: Wealth Management Americas</i>	<i>730.5</i>	<i>325.8</i>	<i>(2.9)</i>	<i>(286.4)</i>	<i>(583.8)</i>
<i>of which: Investment Bank</i>	<i>26.3</i>	<i>14.3</i>	<i>(0.1)</i>	<i>(12.7)</i>	<i>(25.9)</i>
<i>of which: CC – Group ALM</i>	<i>(238.8)</i>	<i>(192.3)</i>	<i>0.0</i>	<i>(10.6)</i>	<i>(24.2)</i>
<i>of which: CC – Non-core and Legacy Portfolio</i>	<i>(1.2)</i>	<i>1.2</i>	<i>(0.1)</i>	<i>(7.3)</i>	<i>(15.6)</i>

<sup>1</sup> Does not include interest rate sensitivities for credit valuation adjustments on monoline credit protection, US and non-US reference-linked notes.

## Other market risk exposures

### Own credit

We are exposed to changes in UBS's own credit that are reflected in the valuation of financial liabilities designated at fair value when UBS's own credit risk would be considered by market participants. We also estimate debit valuation adjustments (DVA) to incorporate own credit in the valuation of derivatives.

→ Refer to "Note 22 Fair value measurement" in the "Consolidated financial statements" section of this report for more information on own credit

### Structural foreign exchange risk

Upon consolidation, assets and liabilities held in foreign operations are translated into Swiss francs at the closing foreign exchange rate on the balance sheet date. Value changes (in Swiss francs) of non-Swiss franc assets or liabilities due to foreign exchange movements are recognized in OCI and therefore affect shareholders' equity and CET1 capital.

Corporate Center – Group ALM employs strategies to manage this foreign currency exposure, including matched funding of assets and liabilities and net investment hedging.

- Refer to the "Treasury management" section of this report for more information on our exposure to and management of structural foreign exchange risk
- Refer to "Note 12 Derivative instruments and hedge accounting" in the "Consolidated financial statements" section of this report for more information on our hedges of net investments in foreign operations

### Equity investments

Audited I Under International Financial Reporting Standards (IFRS) effective on 31 December 2017, equity investments not in the trading book may be classified as *Financial assets available for sale*, *Financial assets designated at fair value* or *Investments in associates*.

We make direct investments in a variety of entities and buy equity holdings in both listed and unlisted companies for a variety of purposes. This includes investments such as exchange and clearing house memberships held to support our business activities. We may also make investments in funds that we manage in order to fund or seed them at inception or to demonstrate that our interests align with those of investors. We also buy, and are sometimes required by agreement to buy, securities and units from funds that we have sold to clients.

The fair value of equity investments tends to be influenced by factors specific to the individual investments. Equity investments are generally intended to be held for the medium or long term and may be subject to lockup agreements. For these reasons, we generally do not control these exposures by using the market risk measures applied to trading activities. However, such equity investments are subject to a different range of controls, including preapproval of new investments by business management and Risk Control, portfolio and concentration limits, and regular monitoring and reporting to senior management. They are also included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework.

As of 31 December 2017, we held equity investments totaling CHF 1.6 billion, of which CHF 0.5 billion were classified as *Financial assets available for sale* and CHF 1.0 billion as *Investments in associates*. This was broadly unchanged from the prior year. ▲

- Refer to “**Note 13 Financial assets available for sale and held to maturity**” and “**Note 28 Interests in subsidiaries and other entities**” in the “**Consolidated financial statements**” section of this report for more information
- Refer to the “**Significant accounting and financial reporting changes in 2018**” section of this report for more information on the classification of financial instruments under IFRS 9

### Debt investments

**Audited I** Debt investments classified as *Financial assets available for sale* as of 31 December 2017 were measured at fair value with changes in fair value recorded through *Equity*, and can broadly be categorized as money market instruments and debt securities primarily held for statutory, regulatory or liquidity reasons.

The risk control framework applied to debt instruments classified as *Financial assets available for sale* depends on the nature of the instruments and the purpose for which we hold them. Our exposures may be included in market risk limits or be subject to specific monitoring and interest rate sensitivity analysis. They are also included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework.

Debt instruments classified as *Financial assets available for sale* had a fair value of CHF 8.1 billion as of 31 December 2017 compared with CHF 15.0 billion as of 31 December 2016. ▲

- Refer to “**Note 13 Financial assets available for sale and held to maturity**” in the “**Consolidated financial statements**” section of this report for more information
- Refer to “**Interest rate risk sensitivity to parallel shifts in yield curves**” in this section for more information
- Refer to the “**Treasury management**” section of this report for more information
- Refer to the “**Significant accounting and financial reporting changes in 2018**” section of this report for more information on the classification and measurement of financial instruments under IFRS 9

### Pension risk

We provide a number of pension plans for past and current employees, some of which are classified as defined benefit pension plans under IFRS. These defined benefit plans can have a material effect on our IFRS equity and CET1 capital.

In order to meet the expected future benefit payments, the plans invest employee and employer contributions in various asset classes. The funded status of the plan is the difference between the fair value of these assets and the present value of the expected future benefit payments to plan members, i.e., the defined benefit obligation.

Pension risk is the risk that the funded status of defined benefit plans might decrease, negatively affecting our IFRS equity and / or our CET1 capital. This can arise from a fall in the plan assets' value or in the investment returns, an increase in defined benefit obligations, or a combination of these.

Important risk factors affecting the fair value of the plan assets are, among other things, equity market returns, interest rates, bond yields and real estate prices. Important risk factors affecting the present value of the expected future benefit payments include high-grade bond yields, interest rates, inflation rates and life expectancy.

Pension risk is included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework. The potential effects are thus captured in the calculation of our post-stress fully applied CET1 capital ratio.

- Refer to “**Note 1a item 7 Pension and other post-employment benefit plans,**” “**Note 26 Pension and other post-employment benefit plans**” and “**Note 35 Events after the reporting period**” in the “**Consolidated financial statements**” section of this report for more information on defined benefit plans and on changes to the pension fund of UBS in Switzerland to support its long-term financial stability

### UBS own share exposure

Group Treasury holds UBS Group AG shares to hedge future share delivery obligations related to employee share-based compensation and participation plans. In addition, the Investment Bank holds a very limited number of UBS Group AG shares, primarily in its capacity as a market-maker in UBS Group AG shares and related derivatives and to hedge certain issued structured debt instruments.

The Group has announced a share repurchase program under which it may acquire up to CHF 2 billion of UBS Group AG shares over the next three years, of which up to CHF 550 million may be acquired in 2018. Shares acquired through the share repurchase program are intended for cancellation. Until the shareholders of UBS Group AG approve cancellation of the shares, shares acquired in the repurchase program will be held in Group Treasury.

- Refer to “**UBS shares**” in the “**Capital management**” section of this report for more information



# Country risk

## Country risk framework

Country risk includes all country-specific events that occur within a sovereign's jurisdiction and may lead to an impairment of UBS's exposures. Country risk may take the form of sovereign risk, which refers to the ability and willingness of a government to honor its financial commitments; transfer risk, which would arise if an issuer or counterparty could not acquire foreign currencies following a moratorium of a central bank on foreign exchange transfers; or "other" country risk. "Other" country risk may manifest itself through increased and multiple counterparty and issuer default risk (systemic risk) on the one hand, and on the other hand through events that may affect the standing of a country, such as adverse shocks affecting political stability or the institutional and legal framework. We maintain a well-established risk control framework, through which we assess the risk profile of all countries where we have exposure.

We attribute to each foreign country a sovereign rating, which expresses the probability of the sovereign defaulting on its own financial obligations in foreign currency. Our ratings are expressed by statistically derived default probabilities as described in the "Probability of default" section. Based on this internal analysis, we also define the probability of a transfer event occurring and establish rules as to how the aspects of "other" country risk should be incorporated into the analysis of the counterparty rating of entities that are domiciled in the respective country.

Our risk exposure to foreign countries considers the credit ratings assigned to those countries. A country risk ceiling (i.e., maximum aggregate exposure) applies to our exposures to counterparties or issuers of securities and financial investments in the respective foreign country. We may limit the extension of credit, transactions in traded products or positions in securities based on a country risk ceiling, even if our exposure to a counterparty is otherwise acceptable.

For internal measurement and control of country risk, we also consider the financial impact of market disruptions arising prior to, during and after a country crisis. These may take the form of a severe deterioration in a country's debt, equity or other asset markets, or a sharp depreciation of the currency. We use stress testing to assess the potential financial impact of a severe country or sovereign crisis. This involves the development of plausible stress scenarios for combined stress testing and the

identification of countries that may potentially be subject to a crisis event, determining potential losses and making assumptions about recovery rates depending on the types of credit transactions involved and their economic importance to the affected countries.

Our exposures to market risks are also subject to regular stress tests that cover major global scenarios, which are used for combined stress testing as well, whereby we apply market shock factors to equity indices, interest rates and currency rates in all relevant countries and consider the potential liquidity of the instruments.

## Country risk exposure

### Country risk exposure measure

The presentation of country risk follows our internal risk view, whereby the basis for measurement of exposures depends on the product category into which we have classified our exposures. In addition to the classification of exposures into banking products and traded products as defined in the "Credit risk profile of the Group" section, within trading inventory we classify issuer risk on securities such as bonds and equities, as well as the risk relating to the underlying reference assets for derivative positions, including those linked to credit protection we buy or sell, loan or security underwriting commitments pending distribution and single-stock margin loans for syndication.

As we manage the trading inventory on a net basis, we net the value of long positions against short positions with the same underlying issuer. Net exposures are, however, floored at zero per issuer in the figures presented in the following tables. We therefore do not recognize the potentially offsetting benefit of certain hedges and short positions across issuers.

We do not recognize any expected recovery values when reporting country exposures as exposure before hedges, except for the risk-reducing effects of master netting agreements and collateral held in the form of either cash or portfolios of diversified marketable securities, which we deduct from the basic positive exposure values. Within banking products and traded products, the risk-reducing effect of any credit protection is taken into account on a notional basis when determining the net of hedges exposures.

### *Country risk exposure allocation*

In general, exposures are shown against the country of domicile of the contractual counterparty or the issuer of the security. For some counterparties whose economic substance in terms of assets or source of revenues is primarily located in a different country, the exposure is allocated to the risk domicile of that issuer.

This is the case, for example, with legal entities incorporated in financial offshore centers, which have their main assets and revenue streams outside the country of domicile. The same principle applies to exposures for which we hold third-party guarantees or collateral, where we report the exposure against the country of domicile of either the guarantor or the issuer of the underlying security, or against the country where pledged physical assets are located.

We apply a specific approach for banking products exposures to branches of financial institutions that are located in a country other than the legal entity's domicile. In such cases, exposures are recorded in full against the country of domicile of the counterparty and additionally in full against the country in which the branch is located.

In the case of derivatives, we show the counterparty risk associated with the positive replacement value (PRV) against the country of domicile of the counterparty (presented within traded products). In addition, the risk associated with the instantaneous fall in value of the underlying reference asset to zero (assuming no recovery) is shown against the country of domicile of the issuer of the reference asset (presented within trading inventory). This approach allows us to capture both the counterparty and, where applicable, issuer elements of risk arising from derivatives and applies comprehensively for all derivatives, including single-name credit default swaps (CDSs) and other credit derivatives.

As a basic example: if CDS protection for a notional value of 100 bought from a counterparty domiciled in country X referencing debt of an issuer domiciled in country Y has a PRV of 20, we record (i) the fair value of the CDS (20) against country X (within traded products) and (ii) the hedge benefit (notional minus fair value) of the CDS ( $100 - 20 = 80$ ) against country Y (within trading inventory). In the example of protection bought, the 80 hedge benefit would offset any exposure arising from securities held and issued by the same entity as the reference asset, floored at zero per issuer. In the case of protection sold, this would be reflected as a risk exposure of 80 in addition to

any exposure arising from securities held and issued by the same entity as the reference asset. In the case of derivatives referencing a basket of assets, the issuer risk against each reference entity is calculated as the expected change in fair value of the derivative given an instantaneous fall in value to zero of the corresponding reference asset (or assets) issued by that entity. Exposures are then aggregated by country across issuers, floored at zero per issuer.

### *Exposures to selected eurozone countries*

Our exposure to peripheral European countries remains limited, but we nevertheless remain watchful regarding the potential broader implications of adverse developments in the eurozone. As noted in "Stress testing" in this section, a eurozone crisis remains a core part of the new binding Severe Eurozone Crisis scenario for combined stress test purposes, making it central to the regular monitoring of risk exposure against the minimum capital, earnings and leverage ratio objectives in our risk appetite framework.

The "Exposures to eurozone countries rated lower than AAA / Aaa by at least one major rating agency" table on the next page provides an overview of our exposures to such rated countries as of 31 December 2017.

CDSs are primarily bought and sold in relation to our trading businesses, but are also used to hedge parts of our risk exposure, including that related to certain eurozone countries. As of 31 December 2017, and not taking into account the risk-reducing effect of master netting agreements, we had purchased approximately CHF 12 billion gross notional of single name CDS protection on issuers domiciled in Greece, Italy, Ireland, Portugal and Spain (GIIPS) and had sold CHF 11 billion gross notional of single-name CDS protection for these same countries. On a net basis, taking into account the risk-reducing effect of master netting agreements, this equates to approximately CHF 3 billion notional purchased and CHF 2 billion notional sold. All gross protection purchased was from investment grade counterparties (based on our internal ratings) and on a collateralized basis. The vast majority of this was from financial institutions domiciled outside the eurozone. The gross protection purchased from counterparties domiciled in a GIIPS country was CHF 66 million, with only CHF 18 million from counterparties domiciled in the same country as the reference entity.

## Exposures to eurozone countries rated lower than AAA / Aaa by at least one major rating agency

CHF million	Total	Banking products (loans, guarantees, loan commitments)			Traded products (counterparty risk from derivatives and securities financing) after master netting agreements and net of collateral		Trading inventory (securities and potential benefits / remaining exposure from derivatives)	
		Net of hedges <sup>1</sup>	Exposure before hedges	Net of hedges <sup>1</sup>	of which: unfunded	Exposure before hedges	Net of hedges	Net long per issuer
<b>31.12.17</b>								
<b>Austria</b>	<b>1,001</b>	<b>896</b>	<b>94</b>	<b>94</b>	<b>46</b>	<b>137</b>	<b>32</b>	<b>770</b>
Sovereign, agencies and central bank	621	516	5	5		114	9	502
Local governments								
Banks	354	354	74	74		15	15	264
Other <sup>2</sup>	26	26	15	15		8	8	3
<b>Belgium</b>	<b>408</b>	<b>408</b>	<b>88</b>	<b>88</b>	<b>5</b>	<b>85</b>	<b>85</b>	<b>235</b>
Sovereign, agencies and central bank	221	221						221
Local governments								
Banks	83	83	71	71		10	10	2
Other <sup>2</sup>	104	104	16	16		76	76	12
<b>Finland</b>	<b>93</b>	<b>77</b>	<b>49</b>	<b>34</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>37</b>
Sovereign, agencies and central bank	30	30						30
Local governments	2	2				2	2	
Banks	9	9	6	6		2	2	1
Other <sup>2</sup>	52	37	43	28		2	2	7
<b>France</b>	<b>7,843</b>	<b>7,744</b>	<b>722</b>	<b>716</b>	<b>490</b>	<b>1,018</b>	<b>926</b>	<b>6,102</b>
Sovereign, agencies and central bank	6,292	6,199	3	3		315	223	5,974
Local governments	0	0						0
Banks	477	477	235	235		241	241	1
Other <sup>2</sup>	1,074	1,068	485	479		462	462	127
<b>Greece</b>	<b>14</b>	<b>14</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>11</b>
Sovereign, agencies and central bank								
Local governments								
Banks	2	2	2	2		0	0	0
Other <sup>2</sup>	11	11	0	0				11
<b>Ireland<sup>3</sup></b>	<b>1,114</b>	<b>1,114</b>	<b>193</b>	<b>193</b>	<b>44</b>	<b>803</b>	<b>803</b>	<b>118</b>
Sovereign, agencies and central bank	1	1						1
Local governments								
Banks	99	99	82	82		12	12	5
Other <sup>2</sup>	1,014	1,014	111	111		792	792	112
<b>Italy</b>	<b>1,507</b>	<b>1,114</b>	<b>1,212</b>	<b>859</b>	<b>756</b>	<b>207</b>	<b>166</b>	<b>89</b>
Sovereign, agencies and central bank	45	5				45	4	1
Local governments	69	69				63	63	6
Banks	271	271	245	245		17	17	9
Other <sup>2</sup>	1,122	769	967	614		82	82	74
<b>Portugal</b>	<b>31</b>	<b>31</b>	<b>17</b>	<b>17</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>12</b>
Sovereign, agencies and central bank	0	0						0
Local governments								
Banks	18	18	17	17		0	0	0
Other <sup>2</sup>	13	13				1	1	12
<b>Spain</b>	<b>749</b>	<b>614</b>	<b>594</b>	<b>460</b>	<b>369</b>	<b>40</b>	<b>40</b>	<b>114</b>
Sovereign, agencies and central bank	48	48	12	12				36
Local governments	2	2						2
Banks	143	143	119	119		24	24	1
Other <sup>2</sup>	555	421	464	329		17	17	75
<b>Other<sup>4</sup></b>	<b>465</b>	<b>465</b>	<b>413</b>	<b>413</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>50</b>

<sup>1</sup> Not deducted from the "Net of hedges" exposures are total allowances and provisions for credit losses of CHF 48 million (of which: Malta CHF 36 million, Ireland CHF 6 million and France CHF 4 million).  
<sup>2</sup> Includes corporates, insurance companies and funds. <sup>3</sup> The majority of the Ireland exposure relates to funds and foreign bank subsidiaries. <sup>4</sup> Represents aggregate exposures to Andorra, Cyprus, Estonia, Latvia, Lithuania, Malta, Monaco, Montenegro, San Marino, Slovakia and Slovenia.

### Exposure from single-name credit default swaps referencing Greece, Italy, Ireland, Portugal or Spain (GIIPS)

CHF million	Protection bought				Protection sold				Net position (after application of counterparty master netting agreements)				
	<i>of which: counterparty domiciled in GIIPS country</i>		<i>of which: counterparty domicile is the same as the reference entity domicile</i>										
	Notional	RV	Notional	RV	Notional	RV	Notional	RV	Buy notional	Sell notional	PRV	NRV	
<b>31.12.17</b>													
Greece	31	(3)	0	0	0	0	(26)	2	19	(14)	0	(2)	
Italy	9,718	(31)	4	0	4	0	(9,430)	(35)	1,669	(1,381)	34	(100)	
Ireland	535	(18)	14	(1)	14	(1)	(448)	11	264	(177)	2	(9)	
Portugal	392	(10)	0	0	0	0	(396)	8	175	(179)	4	(6)	
Spain	1,265	(32)	49	(1)	0	0	(957)	27	622	(315)	11	(16)	
<b>Total</b>	<b>11,941</b>	<b>(94)</b>	<b>66</b>	<b>(2)</b>	<b>18</b>	<b>(1)</b>	<b>(11,258)</b>	<b>12</b>	<b>2,749</b>	<b>(2,066)</b>	<b>50</b>	<b>(132)</b>	

Holding CDSs for credit default protection does not necessarily protect the buyer of protection against losses, as the contracts will only pay out under certain scenarios. The effectiveness of our CDS protection as a hedge of default risk is influenced by a number of factors, including the contractual terms under which the CDS was written. Generally, only the occurrence of a credit event as defined by the CDS terms (which may include, among other events, failure to pay, restructuring or bankruptcy) results in a payment under the purchased credit protection contracts. For CDS contracts on sovereign obligations, repudiation can also be deemed as a default event. The determination as to whether a credit event has occurred is made by the relevant International Swaps and Derivatives Association (ISDA) determination committees (comprised of various ISDA member firms) based on the terms of the CDS and the facts and circumstances surrounding the event.

#### Exposure to emerging market countries

The "Emerging market net exposure by major geographical region and product type" table on the following page shows the five largest emerging market country exposures in each major geographical area by product type as of 31 December 2017 compared with 31 December 2016. Based on the sovereign rating categories, as of 31 December 2017, 79% of our emerging market country exposure was rated investment grade, compared with 83% as of 31 December 2016.

Our direct net exposure to China was CHF 5 billion, down CHF 0.1 billion from the prior year. Trading inventory, which is measured at fair value, continues to account for the majority of our exposure to China.

#### Emerging markets net exposure<sup>1</sup> by internal UBS country rating category

CHF million	31.12.17	31.12.16
Investment grade	14,021	13,833
Sub-investment grade	3,772	2,787
<b>Total</b>	<b>17,794</b>	<b>16,620</b>

<sup>1</sup> Net of credit hedges (for banking products and for traded products); net long per issuer (for trading inventory). Total allowances and provisions of CHF 74 million are not deducted (31 December 2016: CHF 79 million).

## Emerging market net exposures by major geographical region and product type

CHF million	Total		Banking products (loans, guarantees, loan commitments)		Traded products (counterparty risk from derivatives and securities financing) after master netting agreements and net of collateral		Trading inventory (securities and potential benefits / remaining exposure from derivatives)	
	Net of hedges <sup>1</sup>		Net of hedges <sup>1</sup>		Net of hedges		Net long per issuer	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Emerging America</b>	<b>1,405</b>	1,426	<b>400</b>	493	<b>267</b>	321	<b>738</b>	612
Brazil	813	968	131	199	225	263	457	506
Mexico	355	247	148	147	20	49	188	52
Argentina	79	27	22	14	0		57	13
Chile	51	24	28	16	14	2	9	7
Colombia	30	62	18	49	4	4	8	9
Other	76	98	53	69	5	3	19	26
<b>Emerging Asia</b>	<b>12,085</b>	10,799	<b>3,955</b>	3,838	<b>1,705</b>	1,676	<b>6,425</b>	5,285
China	5,020	5,141	706	868	330	394	3,984	3,880
Hong Kong	2,534	1,715	1,445	1,113	403	282	685	320
South Korea	1,453	1,058	527	348	607	469	319	241
India	857	1,047	467	661	165	251	225	135
Thailand	789	443	136	131	8	2	645	310
Other	1,432	1,395	674	717	192	278	566	400
<b>Emerging Europe</b>	<b>1,625</b>	1,467	<b>1,124</b>	1,007	<b>93</b>	106	<b>408</b>	353
Russia	608	532	206	181	51	41	351	311
Turkey	552	467	507	438	21	25	23	4
Azerbaijan	218	145	211	117	1	28	5	
Poland	63	61	43	50	8	7	12	4
Ukraine	60	32	56	23			4	10
Other	126	229	100	199	12	5	13	25
<b>Middle East and Africa</b>	<b>2,678</b>	2,929	<b>1,321</b>	1,029	<b>807</b>	1,373	<b>551</b>	527
South Africa	886	681	345	34	123	239	418	408
United Arab Emirates	533	556	251	391	279	163	3	2
Saudi Arabia	279	577	136	124	143	453		
Kuwait	216	490	19	31	197	459		
Israel	200	225	53	61	35	49	113	115
Other	565	401	518	388	30	10	17	3
<b>Total</b>	<b>17,794</b>	16,620	<b>6,800</b>	6,367	<b>2,872</b>	3,475	<b>8,121</b>	6,778

<sup>1</sup> Not deducted are total allowances and provisions for credit losses of CHF 74 million (31 December 2016: CHF 79 million).

## Operational risk

### Key developments

The pervasive consequential risk themes that continue to challenge UBS and the financial industry are operational resilience, conduct and financial crime.

Operational resilience remains critical, as the cyber threat landscape continues to evolve while other disaster scenarios remain an ever-present threat. In 2017, many organizations were affected by two prominent global malware attacks. Throughout 2017, data theft continued to be the most prevalent threat with a number of serious breaches at high-profile organizations. UBS continues to invest in both preventive measures and measures to detect and recover from cyberattacks. We have implemented cyber recovery playbooks for various scenarios, as well as regular cyber crisis exercises up to the Group Executive Board and Board of Directors level.

As a global firm, UBS was affected by extreme weather events in the US and India in 2017, in each case triggering business continuity procedures, which allowed us to monitor the safety of staff and for operations to continue with minimal disruption.

Achieving fair outcomes for our clients, upholding market integrity and cultivating the highest standards of employee conduct are of critical importance to the firm. Management of conduct risks is an integral part of our operational risk framework. In managing conduct risk, we continue to focus on embedding this framework, enhancing the management information and maintaining momentum on addressing culture. Conduct-related management information is reviewed at the business and regional governance level, providing metrics on employee conduct, clients and markets, with employee conduct being a central consideration in the annual compensation process. Our incentive schemes distinguish clearly between quantitative performance and conduct-related behaviors, so that achievement against financial targets is not the primary determinant of our employees' performance assessment. Furthermore, we continue to deliver on behavioral initiatives, such as the "Principles of Good Supervision," and provide mandatory compliance and risk training.

Suitability risk, product selection, cross-divisional service offerings, quality of advice and price transparency also remain areas of heightened focus for UBS and for the industry as a whole, as low interest rates and major legislative change programs, such as the Markets in Financial Instruments Directive II (MiFID II) in the EU, continue. We regularly monitor our suitability, product and conflicts of interest control frameworks to assess whether they are reasonably designed to facilitate our adherence to applicable laws and regulatory expectations.

Financial crime, including money laundering, terrorist financing, sanctions violations, fraud, bribery and corruption, continues to present risks, as technological innovation and geopolitical developments have increased the complexity of operating an effective program to prevent and detect financial crime. Regulators and other governmental authorities have heightened expectations for financial crime compliance programs and have significantly increased their focus in this area over the last several years. Given the profile of our wealth management businesses as well as heightened regulatory expectations, maintaining effective programs for prevention and detection of money laundering and for sanctions compliance is a high priority for us. We are investing to improve our detection and monitoring capabilities, including in automation of our processes. Money laundering and fraud techniques are becoming increasingly sophisticated, while geopolitical volatility makes the sanctions landscape more complex. We continue to invest in improving our anti-money laundering (AML), terrorist financing prevention, sanctions and fraud control capabilities to meet the evolving challenge and heightened regulatory expectations.

We also continue to invest heavily in our detection capabilities and core systems as part of our financial crime prevention program. We have been exploring new technologies to combat financial crime, and implementing rule-based monitoring by applying self-learning systems to identify suspicious transactions. Furthermore, we are actively participating in AML public-private partnerships with public-sector stakeholders, including law enforcement, to improve information sharing and better detect financial crimes.

Cross-border risk remains an area of regulatory attention for global financial institutions, with a strong focus on fiscal transparency and increased legislation, such as the automatic exchange of information. We continue to adapt our cross-border control framework to adhere to the regulatory expectations and facilitate compliant client-driven cross-border business.

As the overall regulatory environment continues to undergo major change with the introduction of new regulation, international collaboration among regulators, and increased focus on individual liability and industry operating models, it is important that we maintain strong relationships with our industry's regulatory bodies and demonstrate observable progress in achieving and sustaining corrective actions.

→ **Refer to the "Risk factors" section of this report for more information**

## Operational risk framework

Operational risk is an inherent part of our business. Losses can result from inadequate or flawed internal processes, decisions and systems, or from external events. We provide a Group-wide framework that supports identifying, assessing and mitigating material operational risks and their potential concentrations, to achieve a suitable balance between risk and return. The divisional Presidents and the Corporate Center function heads are ultimately accountable for the effectiveness of operational risk management and for implementing the operational risk framework. Responsibility for the front-to-back control environment and risk management is held by the Chief Operating Officers. Management in all functions is responsible for establishing a robust operational risk management environment, including establishing and maintaining internal controls, effective supervision and a strong risk culture. In 2017, we further improved our operational risk framework, streamlined administrative processes, strengthened our abilities to detect and mitigate operational risk and better embedded the framework as a key tool used by the business to manage its risks day-to-day.

Compliance & Operational Risk Control (C&ORC) is responsible for providing an independent and objective view of the adequacy of operational risk management across the Group, and aims to ensure that all our operational risks, including compliance and conduct risk, are understood, owned and managed to the firm's risk appetite. C&ORC is governed by the C&ORC Management Committee, which is chaired by the Global Head of C&ORC, who reports to the Group Chief Risk Officer and is a member of the Risk Executive Committee.

The operational risk framework establishes general requirements for managing and controlling operational risks, including compliance and conduct risk at UBS. It is built on the following pillars:

- classifying inherent risks through the operational risk taxonomy
- assessing the design and operating effectiveness of controls through the internal control assessment process
- assessing residual risk through the risk assessment processes with remediation to address identified deficiencies that are outside accepted levels of residual risk
- defining operational risk appetite, identifying levels of operational risk that exceed defined thresholds and taking appropriate measures to bring residual risk back within the defined appetite

The operational risk taxonomy provides a clear and logical classification of our inherent operational risks, across all divisions. Throughout the organizational hierarchy, a level of risk appetite must be agreed for each of the taxonomy categories, together with a minimum set of internal controls and associated performance thresholds considered necessary to keep risk exposure within acceptable levels.

All functions within our firm are required to assess internal controls periodically, whereby they evaluate and evidence the design and operating effectiveness of their key controls. This also forms the basis for the assessment and testing of internal controls over financial reporting as required by the Sarbanes-Oxley Act, section 404 (SOX 404). The framework facilitates the identification of SOX 404-relevant controls for independent testing, functional assessments, management affirmation and, where control weaknesses are identified, remediation tracking. We employ a consistent global framework to assess the aggregated impact of control deficiencies and the adequacy of remediation efforts.

The UBS risk assessment approach covers all business activities and internal as well as external identified or known factors posing a threat to the UBS Group. Aggregated with any identified or known weaknesses in the control environment, the risk assessment articulates the current operational risk exposure against the firm's risk appetite.

Key control deficiencies that surface during the internal control and risk assessment processes are required to be reported in the operational risk inventory, and sustainable remediation must be defined and executed. These issues are assigned to owners at the senior management level and must be reflected in the respective manager's annual performance measurement and management objectives. To assist with prioritizing the known operational risk issues, irrespective of origin, a common rating methodology is adopted by all internal control functions and both internal and external audit. Group Internal Audit conducts an issue assurance process after a risk issue has been closed to maintain rigorous management discipline in the sustainable mitigation and control of operational risk issues.

### Advanced measurement approach model

The operational risk framework detailed above is aligned with and underpins the calculation of regulatory capital for operational risk, which in turn allows us to quantify operational risk and to define effective management incentives.

We measure operational risk exposure and calculate operational risk regulatory capital by using the advanced measurement approach (AMA) in accordance with FINMA requirements.

For regulated subsidiaries, the basic indicator or standardized approaches are adopted in agreement with local regulators. For certain UBS entities, the Group AMA methodology is leveraged to meet local regulatory requirements. An entity-specific AMA model has been applied for UBS Switzerland AG, while the Group AMA model is leveraged for UBS Limited, supporting the local Internal Capital Adequacy Assessment Process, and for UBS Bank USA's Dodd-Frank Act stress tests submissions.

Currently, the model includes 15 AMA Units of Measures (UoMs), all aligned with our operational risk taxonomy. For each of the model's UoMs, a frequency and severity parameter is calibrated. The modeled distribution functions for both frequency and severity are then leveraged to generate the annual loss distribution. The resulting 99.9% quantile of the overall annual operational risk loss distribution across all UoMs determines the required regulatory capital. Currently, we do not reflect mitigation through insurance or any other risk transfer mechanism in our AMA model.

A key assumption when calibrating the base or data-driven frequency and severity distributions is that historical loss patterns and exposures form a reasonable proxy for future events. However, it is important to note that our approach not only models historical internal losses, but also includes external industry losses. A statistical mechanism aims to ensure that only those industry losses that are fairly consistent with the internal UBS loss profile are used in modeling.

### AMA model calibration and review

To account for fast-changing external developments such as new regulations, geopolitical change, and volatile market and economic conditions, as well as internal factors including changes in business strategy and internal control framework enhancements, the modeling of historical internal and external losses is further enriched to more effectively forecast potential future losses. To refine the loss forecast, qualitative information on both the external business environment and the internal

control framework is summarized and an overall rating is determined to structure and facilitate the Subject Matter Expert (SME) inputs. The purpose of the SME reviews is to account for important qualitative elements in calibrating the AMA model, but also to consider expert knowledge and insights that the SMEs can provide into the calibration process.

To maintain risk sensitivity, our model has to be regularly recalibrated. Therefore, the SME reviews are conducted at least annually, and encompass all UoMs. Change recommendations are presented to FINMA for approval prior to their utilization for disclosure purposes. In addition to the annual reviews, a high-level semiannual review accounts for any material developments between annual calibrations to be reflected in the model outputs. Following regulatory approval, these changes become effective for the subsequent disclosures accordingly.

### AMA model confirmation

The Group AMA model is subject to an annual quantitative and qualitative review so that model parameters are plausible and reflect the developing operational risk profile of the firm. This review is independently verified and confirmed by Model Risk Management & Control and supplemented with additional sensitivity and benchmarking analysis by the model owner.

### Future operational risk-related regulatory capital developments

In December 2017, the Basel Committee on Banking Supervision published the final Basel III framework. Based on the published framework, the regulatory capital requirements on operational risks will be determined by the standardized measurement approach (SMA), which will replace the AMA capital regime.

The SMA is mainly based on two components: a business indicator component, which is basically utilized as a size proxy for the banks in the SMA context, and a historical loss experience component. With regard to the loss experience component, the published framework has a number of parameters that are subject to national discretion. UBS maintains a close dialog with FINMA to discuss in more detail the implementation objectives and to provide for a smooth transition of the capital regime for operational risks.

- **Refer to "Capital management objectives, planning and activities" in the "Capital management" section of this report for more information on the development of RWA**
- **Refer to "Risk measurement" in this section for more information on our approach to model confirmation procedures**
- **Refer to the "Regulatory and legal developments" and "Risk factors" sections of this report for more information**



# Treasury management

## Balance sheet, liquidity and funding management

### Strategy, objectives and governance

**Audited |** We manage our balance sheet, liquidity and funding positions with the overall objective of optimizing the value of our business franchise across a broad range of market conditions and in consideration of current and future regulatory constraints. We employ a number of measures to monitor these positions under normal and stressed conditions. In particular, we use stress scenarios to apply behavioral adjustments to our balance sheet and calibrate the results from these internal stress models with external measures, primarily the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). Our liquidity and funding strategy is proposed by Group Treasury, approved by the Group Asset and Liability Management Committee (Group ALCO), which is a committee of the Group Executive Board, and is overseen by the Risk Committee of the Board of Directors (BoD). ▲

This section provides more detailed information on regulatory requirements, our governance structure, our balance sheet, liquidity and funding management, including our sources of liquidity and funding, and our contingency planning and stress testing. The balances disclosed in this section represent year-end positions, unless indicated otherwise. Intra-period balances fluctuate in the ordinary course of business and may differ from year-end positions.

Group Treasury monitors and oversees the implementation and execution of our liquidity and funding strategy and is responsible for adherence to policies, limits and targets. This enables close control of both our cash and collateral, including our high-quality liquid assets (HQLA), and centralizes the Group's general access to wholesale cash markets in Corporate Center – Group Asset and Liability Management (Group ALM).

In addition, should a crisis require contingency funding measures to be invoked, Group Treasury is responsible for coordinating liquidity generation with representatives of the relevant business areas. Group Treasury reports on the Group's overall liquidity and funding position, including funding status and concentration risks, at least monthly to the Group ALCO and the Risk Committee of the BoD.

**Audited |** Liquidity and funding limits and targets are set at a Group and, where appropriate, at legal entity and business division levels, and are reviewed and reconfirmed at least once a year by the BoD, the Group ALCO, the Group Chief Financial Officer, the Group Treasurer and the business divisions, taking into consideration current and projected business strategy and risk tolerance. The principles underlying our limit and target framework are designed to maximize and sustain the value of our business franchise and maintain an appropriate balance in the asset and liability structure. Structural limits and targets focus on the structure and composition of the balance sheet, while supplementary limits and targets are designed to drive the utilization, diversification and allocation of funding resources. To complement and support this framework, Group Treasury monitors the markets with a dashboard of early warning indicators reflecting the current liquidity situation. The liquidity status indicators are used at Group level to assess both the overall global and regional situations for potential threats. Treasury Risk Control provides independent oversight over liquidity and funding risks. ▲

→ **Refer to the "Corporate governance" section of this report for more information**

→ **Refer to the "Risk management and control" section of this report for more information**

## Assets and liquidity management

**Audited I** Our liquidity risk management aims to maintain a sound liquidity position to meet all our liabilities when due and to provide adequate time and financial flexibility to respond to a firm-specific liquidity crisis in a generally stressed market environment, without incurring unacceptable losses or risking sustained damage to our various businesses. ▲

### Balance sheet assets – Group

As of 31 December 2017, balance sheet assets totaled CHF 916 billion, a decrease of CHF 19 billion from 31 December 2016, mainly due to reductions in positive replacement values (PRVs), cash and balances with central banks and financial assets designated at fair value, available for sale and held to maturity, partly offset by an increase in trading portfolio assets. Total assets excluding PRVs increased by CHF 21 billion to CHF 797 billion as of 31 December 2017. Excluding currency effects, total assets excluding PRVs increased by CHF 22 billion.

PRVs decreased by CHF 40 billion, primarily resulting from a CHF 24 billion decrease in our Foreign Exchange, Rates and Credit business within the Investment Bank, mainly related to foreign exchange contracts, primarily reflecting net maturities, partly offset by fair value changes resulting from currency market movements, and a CHF 19 billion reduction in Non-core and Legacy Portfolio, primarily reflecting trade terminations and maturities, mainly related to interest rate and foreign exchange contracts. Cash and balances with central banks decreased by CHF 20 billion, largely in Group ALM, mainly due to higher consumption by the business divisions, partly offset by net issuances of short-term and long-term debt. Financial assets designated at fair value, available for sale and held to maturity decreased by CHF 14 billion, primarily resulting from rebalancing within our HQLA portfolio held by Group ALM, partly offset by a client-driven increase in Corporate Client Solutions within the Investment Bank.

These decreases were partly offset by a CHF 34 billion increase in trading portfolio assets, primarily in our Equities

business within the Investment Bank, mainly reflecting a client-driven increase and higher equity markets. Lending assets increased by CHF 14 billion, mainly due to higher Lombard lending balances in Wealth Management. Receivables from securities financing transactions increased by CHF 8 billion, primarily in Group ALM, mainly resulting from the aforementioned rebalancing within our HQLA portfolio.

Other assets were broadly unchanged as a CHF 9 billion client-driven increase in prime brokerage receivables was offset by a decrease in assets held for sale, following completion of the sale of a life insurance subsidiary within Wealth Management, a reduction in cash collateral receivables on derivative instruments and lower deferred tax assets.

→ Refer to the “Consolidated financial statements” section of this report for more information

### Balance sheet assets – Investment Bank

Investment Bank total assets increased by CHF 21 billion to CHF 263 billion, and total assets excluding PRVs increased by CHF 41 billion, mainly due to a CHF 34 billion increase in trading portfolio assets and a CHF 9 billion increase in prime brokerage receivables, primarily in our Equities business, reflecting client-driven increases and higher equity markets. A CHF 7 billion increase in financial assets designated at fair value, available for sale and held to maturity, primarily in Corporate Client Solutions, was more than offset by an CHF 8 billion decrease in receivables from securities financing transactions, mainly in Equities.

### Balance sheet assets – Non-core and Legacy Portfolio

Non-core and Legacy Portfolio total assets decreased by CHF 22 billion to CHF 46 billion, mainly due to a CHF 19 billion reduction in PRVs, primarily reflecting trade terminations and maturities, mainly related to interest rate and foreign exchange contracts.

Total assets excluding PRVs decreased by CHF 4 billion to CHF 8 billion, mainly due to a reduction in cash collateral receivables on derivative instruments.

## IFRS balance sheet assets

CHF billion	As of		% change from
	31.12.17	31.12.16	
Cash and balances with central banks	87.8	107.8	(19)
Lending <sup>1</sup>	333.3	319.5	4
Collateral trading <sup>2</sup>	89.6	81.4	10
Trading portfolio	130.7	96.6	35
Positive replacement values	118.2	158.4	(25)
Financial assets at FV / AFS / HTM <sup>3</sup>	76.8	90.3	(15)
Other assets <sup>4</sup>	79.2	81.1	(2)
<b>Total IFRS assets</b>	<b>915.6</b>	<b>935.0</b>	<b>(2)</b>

<sup>1</sup> Consists of amounts due from banks and loans. <sup>2</sup> Consists of reverse repurchase agreements and cash collateral on securities borrowed. <sup>3</sup> Consists of financial assets designated at fair value, financial assets available for sale and financial assets held to maturity. <sup>4</sup> Includes cash collateral receivables on derivative instruments and prime brokerage receivables.

### Balance sheet assets – Group ALM

Group ALM total assets decreased by CHF 21 billion to CHF 246 billion, primarily reflecting a CHF 20 billion reduction in cash and balances with central banks, mainly due to higher consumption by the business divisions, partly offset by net issuances of short-term and long-term debt. Financial assets designated at fair value, available for sale and held to maturity decreased by CHF 20 billion, mostly offset by a CHF 17 billion increase in receivables from securities financing transactions, primarily resulting from rebalancing within our HQLA portfolio.

### Balance sheet assets – Other business divisions

Wealth Management total assets increased by CHF 7 billion, primarily due to higher Lombard lending balances, partly offset by a decrease in assets held for sale, following completion of the sale of a life insurance subsidiary. Asset Management total assets increased by CHF 2 billion to CHF 14 billion, reflecting an increase in unit-linked investment contracts.

Personal & Corporate Banking total assets decreased by CHF 4 billion to CHF 136 billion, mainly reflecting lower mortgage and other lending balances. Corporate Center – Services total assets decreased by CHF 3 billion to CHF 21 billion, resulting from the net write-down of the Group's deferred tax assets following a reduction in the US federal corporate tax rate after the enactment of the Tax Cuts and Jobs Act in the US during the fourth quarter of 2017.

Wealth Management Americas total assets were broadly unchanged at CHF 67 billion.

### High-quality liquid assets

HQLA are low-risk unencumbered assets under the control of Group Treasury that are easily and immediately convertible into cash at little or no loss of value in order to meet liquidity needs in a 30-calendar-day liquidity stress scenario. Our HQLA predominantly consist of assets that qualify as Level 1 in the LCR framework, including cash, central bank reserves and government bonds. Group HQLA are held by UBS AG and its subsidiaries and may include amounts that are available to meet funding and collateral needs in certain jurisdictions, but are not readily available for use by the Group as a whole. These limitations are typically the result of local regulatory requirements, including local LCR and large exposure requirements. Funds that are effectively restricted are excluded from the calculation of Group HQLA to the extent they exceed the outflow assumptions for the subsidiary that holds the relevant HQLA. On this basis, CHF 30 billion of assets were excluded from our daily average Group HQLA for the fourth quarter of 2017. Amounts held in excess of local liquidity requirements that are not subject to other restrictions are generally available for transfer within the Group.

The total weighted liquidity value of HQLA decreased by CHF 13 billion to CHF 183 billion, primarily reflecting increased funding consumption by the business divisions.

### Liquidity coverage ratio

The LCR measures the short-term resilience of a bank's liquidity profile by comparing whether sufficient HQLA are available to survive expected net cash outflows from a significant liquidity stress scenario, as defined by the relevant regulator.

The Basel Committee on Banking Supervision (BCBS) standards require an LCR of at least 100% by 2019, with a phase-in period that started in 2015. UBS is required to maintain a minimum total Group LCR of 110% as communicated by the Swiss Financial Market Supervisory Authority (FINMA), as well as a Swiss franc LCR of 100%. In addition, both UBS AG and UBS Switzerland AG are subject to minimum LCR requirements on a standalone basis. In a period of financial stress, FINMA may allow banks to use their HQLA and let their LCR temporarily fall below the minimum threshold.

We monitor the LCR in all significant currencies in order to manage any currency mismatches between HQLA and the net expected cash outflows in times of stress.

Our daily average LCR for the fourth quarter of 2017 was 143% compared with a three-month average of 132% in the fourth quarter of 2016, mainly due to a CHF 20 billion reduction in net cash outflows, partly offset by the aforementioned reduction in HQLA. The CHF 20 billion reduction in net cash outflows was primarily driven by secured financing transactions, financial liabilities at fair value reported in unsecured wholesale funding and committed facilities reported in other cash outflows.

- **Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on the liquidity coverage ratio**
- **Refer to “Holding company and significant regulated subsidiaries and sub-groups” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on the liquidity coverage ratio of UBS AG and UBS Switzerland AG**

In December 2017, FINMA amended its circular “Liquidity risks – banks” following the Federal Council's amendment to a number of provisions on bank liquidity in the Liquidity Ordinance. The circular is effective from 1 January 2018. We expect moderate upward pressure in net cash outflows affecting our LCR in the first quarter of 2018 as a result of these amendments.

## Liquidity coverage ratio

	Average 4Q17 <sup>1</sup>	Average 4Q16 <sup>1</sup>
<b>High-quality liquid assets<sup>2</sup></b>		
Cash balances <sup>3</sup>	103	102
Securities (on- and off-balance sheet)	80	94
<b>Total high-quality liquid assets<sup>4</sup></b>	<b>183</b>	<b>196</b>
<b>Cash outflows<sup>5</sup></b>		
Retail deposits and deposits from small business customers	26	26
Unsecured wholesale funding	104	109
Secured wholesale funding	79	73
Other cash outflows	44	58
<b>Total cash outflows</b>	<b>254</b>	<b>266</b>
<b>Cash inflows<sup>5</sup></b>		
Secured lending	83	71
Inflows from fully performing exposures	33	32
Other cash inflows	10	15
<b>Total cash inflows</b>	<b>126</b>	<b>117</b>
<b>Liquidity coverage ratio</b>		
High-quality liquid assets	183	196
Net cash outflows	128	148
<b>Liquidity coverage ratio (%)</b>	<b>143</b>	<b>132</b>

<sup>1</sup> Calculated based on an average of 63 data points in the fourth quarter of 2017. The fourth quarter of 2016 is based on a three-month average. <sup>2</sup> Calculated after the application of haircuts. <sup>3</sup> Includes cash and balances with central banks and other eligible balances as prescribed by FINMA. <sup>4</sup> Calculated in accordance with FINMA requirements. <sup>5</sup> Calculated after the application of inflow and outflow rates.

## Asset encumbrance

The table on the next page provides a breakdown of on- and off-balance sheet assets between encumbered assets, unencumbered assets and assets that cannot be pledged as collateral.

Assets are presented as *Encumbered* if they have been pledged as collateral against an existing liability or if they are otherwise not available for the purpose of securing additional funding. Included within the latter category are assets protected under client asset segregation rules, assets held by the Group's insurance entities to back related liabilities to policy holders, assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities, such as certain investment funds and other structured entities.

→ Refer to "Note 23 Restricted and transferred financial assets" in the "Consolidated financial statements" section of this report for more information

*Assets that cannot be pledged as collateral* represent those assets that are not encumbered, but by their nature are not considered available to secure funding or to meet collateral needs. These mainly include collateral trading assets, PRVs, cash collateral receivables on derivative instruments, deferred tax assets, goodwill and intangible assets and other assets.

All other assets are presented as *Unencumbered*. Assets that are considered to be readily available to secure funding on a Group and / or legal entity level are shown separately and consist of cash and securities readily realizable in the normal course of business. These include our HQLA and unencumbered positions in our trading portfolio. Unencumbered assets that are considered to be available to secure funding on a legal entity level may be subject to restrictions that limit the total amount of assets that is available to the Group as a whole. Other unencumbered assets, which are not considered readily available to secure funding on a Group and / or legal entity level, primarily consist of loans and amounts due from banks.

## Asset encumbrance

	Encumbered		Unencumbered			Total Group assets (IFRS)
	Assets pledged as collateral	Assets otherwise restricted and not available to secure funding	Cash and securities available to secure funding on a Group and / or legal entity level	Other realizable assets	Assets that cannot be pledged as collateral	
<i>CHF million</i>						
<b>On-balance sheet assets</b>						
<b>Cash and balances with central banks</b>			<b>87,775</b>		<b>0</b>	<b>87,775</b>
Due from banks		3,280		10,432	27	13,739
Financial assets designated at fair value	170	2,602	45,117	10,439	605	58,933
Loans	17,631	1,256		288,967	11,713	319,568
<i>of which: mortgage loans</i>	<i>17,631</i>			<i>145,493</i>		<i>163,124</i>
<b>Lending</b>	<b>17,801</b>	<b>7,137</b>	<b>45,117</b>	<b>309,838</b>	<b>12,344</b>	<b>392,239</b>
Cash collateral on securities borrowed					12,393	12,393
Reverse repurchase agreements		0			77,240	77,240
<b>Collateral trading</b>		<b>0</b>			<b>89,633</b>	<b>89,633</b>
<b>Trading portfolio assets excluding financial assets for unit-linked investment contracts</b>	<b>46,219<sup>1</sup></b>	<b>957</b>	<b>68,369</b>	<b>3,847</b>		<b>119,392</b>
<i>of which: government bills / bonds</i>	<i>4,397</i>	<i>0</i>	<i>8,457</i>			<i>12,854</i>
<i>of which: corporate and municipal bonds</i>	<i>2,307</i>	<i>208</i>	<i>6,048</i>			<i>8,563</i>
<i>of which: loans</i>				<i>3,847</i>		<i>3,847</i>
<i>of which: investment fund units</i>	<i>2,495</i>	<i>749</i>	<i>6,389</i>			<i>9,632</i>
<i>of which: asset-backed securities</i>	<i>8</i>		<i>360</i>			<i>368</i>
<i>of which: mortgage-backed securities</i>	<i>8</i>		<i>149</i>			<i>157</i>
<i>of which: equity instruments</i>	<i>37,013</i>		<i>42,552</i>			<i>79,565</i>
<i>of which: precious metals and other physical commodities</i>			<i>4,563</i>			<i>4,563</i>
<b>Financial assets for unit-linked investment contracts</b>		<b>11,316</b>				<b>11,316</b>
<b>Positive replacement values</b>					<b>118,227</b>	<b>118,227</b>
<b>Financial assets available for sale</b>		<b>246</b>	<b>8,419</b>			<b>8,665</b>
<b>Financial assets held to maturity</b>			<b>9,166</b>			<b>9,166</b>
Cash collateral receivables on derivative instruments		3,822			19,612	23,434
Investments in associates				1,018		1,018
Property, equipment and software				8,829		8,829
Goodwill and intangible assets					6,398	6,398
Deferred tax assets					9,844	9,844
Other assets		95			29,612	29,706
<b>Other</b>		<b>3,917</b>		<b>9,847</b>	<b>65,466</b>	<b>79,230</b>
<b>Total on-balance sheet assets as of 31 December 2017</b>	<b>64,020</b>	<b>23,573</b>	<b>218,846</b>	<b>323,532</b>	<b>285,671</b>	<b>915,642</b>
Total on-balance sheet assets as of 31 December 2016	57,213	26,470	238,321	304,944	308,069	935,016

	Encumbered		Unencumbered			Total assets received that can be sold or repledged
	Assets that have been sold or repledged as collateral	Assets otherwise restricted and not available to secure funding	Assets available to secure funding on a Group and / or legal entity level	Other realizable assets	Assets that cannot be pledged as collateral	
<i>CHF million</i>						
<b>Off-balance sheet assets</b>						
<b>Total off-balance sheet assets as of 31 December 2017</b>	<b>337,514</b>	<b>13,005</b>	<b>114,144</b>	<b>4,469</b>		<b>469,132</b>
Total off-balance sheet assets as of 31 December 2016	316,323	12,632	96,833	3,540		429,327
<b>Total on- and off-balance sheet assets as of 31 December 2017</b>	<b>401,534</b>	<b>36,579</b>	<b>332,990</b>	<b>328,001</b>	<b>285,671</b>	
<i>of which: high-quality liquid assets</i>			<i>172,391</i>			
Total on- and off-balance sheet assets as of 31 December 2016	373,536	39,102	335,153	308,484	308,069	
<i>of which: high-quality liquid assets</i>			<i>200,226</i>			

<sup>1</sup> Includes CHF 35,363 million of assets pledged as collateral that may be sold or repledged by counterparties.

### Unencumbered assets available to secure funding on a Group and / or legal entity level by currency

<i>CHF million</i>	<b>31.12.17</b>	31.12.16
Swiss franc	<b>63,193</b>	71,915
US dollar	<b>139,699</b>	132,379
Euro	<b>42,754</b>	54,867
Other	<b>87,344</b>	75,993
<b>Total</b>	<b>332,990</b>	335,153

#### Stress testing

**Audited |** We perform stress testing to determine the optimal asset and liability structure that allows us to maintain an appropriately balanced liquidity and funding position under various scenarios. Liquidity crisis scenario analysis and contingency funding planning support the liquidity management process and ensure that immediate corrective measures to absorb potential sudden liquidity shortfalls can be put into effect. ▲

We model our liquidity exposures under two main potential scenarios that encompass stressed and acute market conditions, including considering the possible impact on our access to markets from stress events affecting all parts of our business. These models and their assumptions are reviewed regularly to incorporate the latest business and market developments. We continuously refine the assumptions used to maintain a robust, actionable and tested contingency plan.

→ **Refer to “Risk measurement” in the “Risk management and control” section of this report for more information on stress testing**

#### Stressed scenario

As a liquidity crisis could have a myriad of causes, the stressed scenario encompasses potential stress effects across all markets, currencies and products but it is typically not firm-specific. In addition to the loss of the ability to replace maturing wholesale funding, it assumes a gradual decline of otherwise stable client deposits and liquidity outflows corresponding to a two-notch downgrade in our long-term credit rating and a corresponding downgrade in our short-term rating.

We use a cash capital model that incorporates the stress scenario and measures the amount of long-term funding available to fund illiquid assets. The illiquid portion of an asset is the difference, i.e., the haircut, between the carrying value of the asset and its effective cash value when used as collateral in a secured funding transaction. Long-term funding used as cash capital to support illiquid assets is comprised of unsecured funding with a remaining time to maturity of at least one year, shareholders’ equity and core deposits, which are the portion of our customer deposits that are deemed to have a behavioral maturity of at least one year.

#### Acute scenario

The acute scenario represents an extreme stress event that combines a firm-specific crisis with market disruption. This scenario assumes substantial outflows on otherwise stable client deposits, mainly due on demand, inability to renew or replace maturing unsecured wholesale funding, unusually large drawdowns on loan commitments, reduced capacity to generate liquidity from trading assets, liquidity outflows corresponding to a three-notch downgrade in our long-term credit rating and a corresponding downgrade in our short-term rating, triggering contractual obligations to unwind derivative positions or to deliver additional collateral, and additional collateral requirements due to adverse movements in the market values of derivatives. It is run both daily and monthly, with the former used to project potential cash outflows over a one-month time horizon for day-to-day risk management, while the latter involves a more detailed assessment of asset and liability cash flows.

#### Contingency funding

**Audited |** Our Group contingency funding plan is an integral part of our global crisis management framework, which covers various types of crisis events. This contingency funding plan contains an assessment of contingent funding sources in a stressed environment, liquidity status indicators and metrics, and contingency procedures. Our funding diversification and global scope help protect our liquidity position in the event of a crisis. We regularly assess and test all material, known and expected cash flows, as well as the level and availability of high-grade collateral that could be used to raise additional funding if required. Our contingent funding sources include our HQLA portfolio, available and unutilized liquidity facilities at several major central banks, and contingent reductions of liquid trading portfolio assets. ▲

## Liabilities and funding management

**Audited** | Group Treasury regularly monitors our funding status, including concentration risks, to ensure we maintain a well-balanced and diversified liability structure. Our funding risk management aims for the optimal asset and liability structure to finance our businesses reliably and cost-efficiently, and our funding activities are planned by analyzing the overall liquidity and funding profile of our balance sheet, taking into account the amount of stable funding that would be needed to support ongoing business activities through periods of difficult market conditions. ▲

Our business activities generate asset and liability portfolios that are highly diversified with respect to market, product, tenor and currency. This reduces our exposure to individual funding sources, provides a broad range of investment opportunities and reduces liquidity risk.

Our wealth management businesses and Personal & Corporate Banking provide significant, cost-efficient and reliable sources of funding. These include core deposits and our portfolio of Swiss residential mortgages, a portion of which is pledged as collateral to generate long-term funding through Swiss Pfandbriefe. In addition, we have several short-, medium- and long-term funding programs under which we issue senior unsecured debt and structured notes, as well as short-term debt.

These programs allow institutional and private investors in Europe, the US and Asia Pacific to customize their investments in UBS's debt. Collectively, these broad product offerings and funding sources, together with the global scope of our business activities, support our funding stability.

### Balance sheet liabilities

Total liabilities decreased by CHF 16 billion to CHF 864 billion as of 31 December 2017. Negative replacement values decreased by CHF 38 billion, in line with the aforementioned decreases in PRVs. Customer deposits decreased by CHF 15 billion, primarily in Wealth Management Americas, mainly reflecting client-driven decreases, in response to rising interest rates and higher equity markets, and the shift of customer sweep deposit balances in excess of insured limits to third-party banks. As of 31 December 2017, customer deposits represented 60% of our funding sources and our ratio of customer deposits to outstanding loan balances was 128% (31 December 2016: 138%). Other liabilities decreased by CHF 11 billion, mainly due to the aforementioned completion of the sale of a life insurance subsidiary in Wealth Management, a reduction in cash collateral payables on derivative instruments and lower prime brokerage payables.

### IFRS balance sheet liabilities and equity

	As of		% change from
CHF billion	31.12.17	31.12.16	31.12.16
Short-term borrowings <sup>1</sup>	58.5	36.8	59
Collateral trading <sup>2</sup>	17.0	9.4	81
Trading portfolio	30.5	22.8	33
Negative replacement values	116.1	153.8	(24)
Due to customers	409.0	423.7	(3)
Long-term debt issued <sup>3</sup>	142.8	132.5	8
Other liabilities <sup>4</sup>	90.4	101.7	(11)
<b>Total IFRS liabilities</b>	<b>864.4</b>	<b>880.7</b>	<b>(2)</b>
Share capital	0.4	0.4	0
Share premium	25.9	28.3	(8)
Treasury shares	(2.1)	(2.2)	(5)
Retained earnings	32.8	31.7	3
Other comprehensive income <sup>5</sup>	(5.7)	(4.5)	28
<b>Total IFRS equity attributable to shareholders</b>	<b>51.2</b>	<b>53.6</b>	<b>(4)</b>
IFRS equity attributable to non-controlling interests	0.1	0.7	(92)
<b>Total IFRS equity</b>	<b>51.3</b>	<b>54.3</b>	<b>(6)</b>
<b>Total IFRS liabilities and equity</b>	<b>915.6</b>	<b>935.0</b>	<b>(2)</b>

<sup>1</sup> Consists of short-term debt issued and amounts due to banks. <sup>2</sup> Consists of repurchase agreements and cash collateral on securities lent. <sup>3</sup> Consists of long-term debt issued held at amortized cost and financial liabilities designated at fair value. The classification of debt issued into short-term and long-term does not consider any early redemption features. <sup>4</sup> Includes cash collateral payables on derivative instruments and prime brokerage payables. <sup>5</sup> Excludes defined benefit plans and own credit that are recorded directly in Retained earnings.

These decreases were offset by a CHF 22 billion increase in short-term borrowings, which represented 9% of our funding sources, mainly reflecting net issuances of commercial paper and certificates of deposit, primarily to support short-term funding requirements.

Long-term debt issued, which represented 21% of our funding sources as of 31 December 2017, increased by CHF 10 billion, mainly due to an CHF 11 billion increase in long-term debt held at amortized cost, primarily reflecting the issuance of CHF 10 billion equivalent of US dollar-, euro- and Swiss franc-denominated senior unsecured debt that contributes to our total loss-absorbing capacity (TLAC) and the issuance of CHF 14 billion equivalent of senior unsecured debt, partly offset by the maturity or early redemption of CHF 8 billion equivalent of senior unsecured debt and CHF 2 billion equivalent of tier 2 capital instruments.

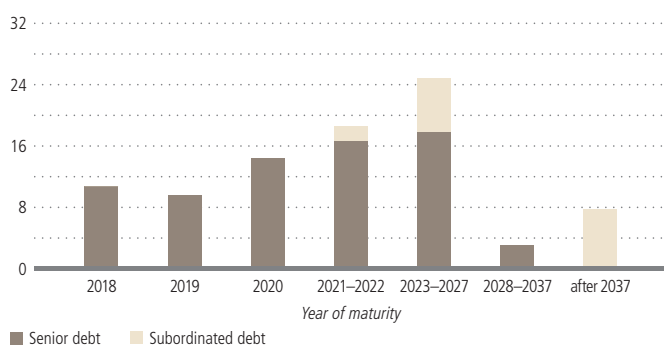
Trading portfolio liabilities increased by CHF 8 billion, primarily reflecting client-driven increases in Corporate Client Solutions. Payables from securities financing transactions increased by CHF 8 billion, primarily in Group ALM.

- Refer to the document “UBS Group AG consolidated capital instruments and TLAC-eligible senior unsecured debt” under “Bondholder information” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information
- Refer to the “Consolidated financial statements” section of this report for more information

### Contractual maturity profile of outstanding long-term debt held at amortized cost

CHF billion, except where indicated

As of 31.12.17



### Funding by product and currency

	CHF billion		As a percentage of total funding sources (%)									
	All currencies		All currencies		CHF		EUR		USD		Other	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Short-term borrowings	58.5	36.8	8.5	5.5	0.5	0.6	3.1	0.9	3.7	2.9	1.3	1.1
of which: due to banks	7.5	10.6	1.1	1.6	0.4	0.5	0.1	0.1	0.3	0.7	0.2	0.3
of which: short-term debt issued <sup>1</sup>	51.0	26.2	7.4	3.9	0.0	0.1	2.9	0.8	3.4	2.2	1.1	0.8
Securities financing transactions	17.0	9.4	2.5	1.4	0.0	0.0	0.3	0.3	2.0	1.0	0.2	0.1
of which: securities lending	1.8	2.8	0.3	0.4	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0
of which: repurchase agreements	15.3	6.6	2.2	1.0	0.0	0.0	0.3	0.3	1.8	0.6	0.2	0.1
Cash collateral payables on derivative instruments	30.2	35.5	4.4	5.3	0.1	0.2	1.4	1.8	2.1	2.3	0.8	1.0
Due to customers	409.0	423.7	59.5	63.2	24.7	24.4	7.2	7.7	22.2	25.7	5.4	5.4
of which: demand deposits	188.6	194.0	27.4	29.0	9.1	8.9	6.3	6.6	8.1	9.6	4.0	3.9
of which: retail savings / deposits	161.8	170.7	23.5	25.5	14.5	14.1	0.8	0.8	8.2	10.6	0.0	0.0
of which: time deposits	47.4	52.7	6.9	7.9	1.0	1.4	0.1	0.2	4.5	4.9	1.3	1.4
of which: fiduciary deposits	11.2	6.2	1.6	0.9	0.1	0.1	0.0	0.1	1.4	0.6	0.1	0.1
Long-term debt issued <sup>2</sup>	142.8	132.5	20.8	19.8	1.8	1.9	4.9	4.9	12.5	11.6	1.6	1.3
Prime brokerage payables	29.6	32.0	4.3	4.8	0.1	0.1	0.5	0.6	2.5	2.8	1.3	1.3
<b>Total</b>	<b>687.2</b>	<b>669.9</b>	<b>100.0</b>	<b>100.0</b>	<b>27.2</b>	<b>27.2</b>	<b>17.3</b>	<b>16.2</b>	<b>44.9</b>	<b>46.2</b>	<b>10.5</b>	<b>10.3</b>

<sup>1</sup> Short-term debt issued is comprised of certificates of deposit, commercial paper, acceptances and promissory notes, and other money market paper. <sup>2</sup> Long-term debt issued also includes debt with a remaining time to maturity of less than one year. The classification of debt issued into short-term and long-term does not consider any early redemption features.



## Asset funding

CHF billion, except where indicated

As of 31.12.17

Assets		Liabilities and equity	
102	Cash, balances with central banks and due from banks	Short-term borrowings	58
77	Financial investments designated at fair value, available for sale and held to maturity	Securities financing transactions	17
90	Securities financing transactions	Trading portfolio	30
131	Trading portfolio	Demand deposits	189
320	Loans	Retail savings / deposits	162
81	Other (including net replacement values)	Time deposits	47
		Fiduciary deposits	11
		Financial liabilities designated at fair value <sup>2</sup>	54
		Held at amortized cost	89
		Other	90
		Total equity	51

CHF 73 billion collateral surplus

128% coverage CHF 89 billion surplus

Due to customers

Long-term debt issued<sup>1</sup>

<sup>1</sup> Long-term debt issued also includes debt with a remaining time to maturity of less than one year. <sup>2</sup> Including structured over-the-counter debt instruments.

### Equity

Equity attributable to shareholders decreased by CHF 2,407 million to CHF 51,214 million as of 31 December 2017.

Total comprehensive income attributable to shareholders was negative CHF 210 million, reflecting net profit of CHF 1,053 million and negative other comprehensive income (OCI) of CHF 1,263 million. Negative OCI included net losses on cash flow hedges of CHF 621 million, foreign currency translation losses of CHF 530 million, own credit losses of CHF 313 million and negative OCI related to financial assets available for sale of CHF 86 million, partly offset by net gains on defined benefit plans of CHF 288 million.

Share premium decreased by CHF 2,313 million, primarily due to the distribution of CHF 2,229 million out of the capital contribution reserve and a reduction of CHF 845 million from the delivery of treasury shares under share-based compensation plans, partly offset by an increase of CHF 721 million due to the amortization of deferred equity compensation awards in the income statement.

Net treasury share activity increased equity attributable to shareholders by CHF 116 million, mainly reflecting the net disposal of treasury shares related to employee share-based compensation awards.

Equity attributable to non-controlling interests decreased by CHF 625 million to CHF 57 million, primarily as we redeemed a EUR 600 million non-Basel III-compliant hybrid tier 1 capital instrument on its first call date.

→ Refer to the "Group performance" and "Consolidated financial statements" sections of this report for more information

### Net stable funding ratio

The NSFR framework is intended to limit overreliance on short-term wholesale funding, to encourage a better assessment of funding risk across all on- and off-balance sheet items and to promote funding stability. The NSFR consists of two components: available stable funding (ASF) and required stable funding (RSF). ASF is the portion of capital and liabilities expected to be available over the period of one year. RSF is a measure of the stable funding requirement of an asset based on its maturity, encumbrance and other characteristics, as well as the potential for contingent calls on funding liquidity from off-balance sheet exposures. The Basel Committee on Banking Supervision (BCBS) NSFR regulatory framework requires a ratio of at least 100% from 2018.

We report our estimated pro forma NSFR based on current guidance from FINMA and will adjust our NSFR reporting according to the final implementation of the BCBS NSFR disclosure standards in Switzerland.

As of 31 December 2017, our estimated pro forma NSFR was 105%, a decrease of 11 percentage points from 31 December 2016, primarily reflecting a CHF 44 billion increase in required stable funding, mainly driven by an increase in trading assets, loans and prime brokerage receivables. The calculation of our pro forma NSFR includes interpretation and estimates of the effect of the NSFR rules, and will be refined as regulatory interpretations evolve and as new models and associated systems are enhanced. In November 2017, the Swiss Federal Council informed that the introduction of the NSFR, which was originally planned for 1 January 2018, has been postponed and that it will reconsider the matter at the end of 2018.

### Pro forma net stable funding ratio

CHF billion, except where indicated	31.12.17	31.12.16
Available stable funding	447	442
Required stable funding	425	381
<b>Pro forma net stable funding ratio (%)</b>	<b>105</b>	<b>116</b>

### Internal funding and funds transfer pricing

We employ an integrated liquidity and funding framework to govern the liquidity management of all our branches and subsidiaries, and our major sources of liquidity are channeled through entities that are fully consolidated. Group ALM meets internal demands for funding by channeling funds from entities generating surplus cash to those in need of financing, except in those circumstances where transfer restrictions exist.

Funding costs and benefits are allocated to our business divisions and Non-core and Legacy Portfolio according to our liquidity and funding risk management framework. Our internal funds transfer pricing system, which is governed by Group Treasury, is designed to provide the proper liability structure to support the assets and planned activities of each business division. The funds transfer pricing mechanism aims to allocate funding and liquidity costs to the activities generating the liquidity and funding risks, and deals with the movement of funds from those businesses in surplus to those that have a shortfall. Funding is internally transferred or allocated among businesses at rates and tenors that reflect each business's asset composition, liquidity and reliable external funding and, for major subsidiaries, is entity-specific. We regularly review our internal funds transfer pricing mechanisms, and make enhancements where appropriate to help better accomplish our liquidity and funding management objectives.

### Credit ratings

Credit ratings can affect the cost and availability of funding, especially funding from wholesale unsecured sources. Our credit ratings can also influence the performance of some of our businesses and the levels of client and counterparty confidence. Rating agencies take into account a range of factors when assessing creditworthiness and setting credit ratings. These include the company's strategy, its business position and franchise value, stability and quality of earnings, capital adequacy, risk profile and management, liquidity management, diversification of funding sources, asset quality and corporate governance. Credit ratings reflect the opinions of the rating agencies and can change at any time.

In evaluating our liquidity and funding requirements, we consider the potential impact of a reduction in UBS's long-term credit ratings and a corresponding reduction in short-term ratings.

If our credit ratings were to be downgraded, rating trigger clauses could result in an immediate cash settlement or the need to deliver additional collateral to counterparties from contractual obligations related to over-the-counter (OTC) derivative positions and other obligations. Based on our credit ratings as of 31 December 2017, CHF 0.1 billion, CHF 0.4 billion and CHF 1.3 billion would have been required for such contractual obligations in the event of a one-notch, two-notch and three-

notch reduction in long-term credit ratings, respectively. Of these, the portion related to additional collateral is CHF 0.1 billion, CHF 0.3 billion and CHF 0.8 billion, respectively.

There were two main rating actions on UBS Group AG's and UBS AG's solicited credit ratings in 2017 and one rating action related to UBS Group AG in 2018 up to the date of this report.

On 28 September 2017, Fitch Ratings upgraded UBS Group AG's long-term issuer default rating to A+ (stable outlook) from A, and UBS AG's long-term issuer default rating to AA- (stable outlook) from A+.

On 25 September 2017, Scope Ratings AG upgraded UBS Group AG's issuer credit strength rating to A+ (stable outlook) from A, and UBS AG's issuer credit strength rating to AA- (stable outlook) from A.

On 29 January 2018, Standard & Poor's Global Ratings downgraded UBS Group AG's high-trigger additional tier 1 instruments rating to BB (stable outlook) from BB+.

→ Refer to **"Liquidity and funding management are critical to our ongoing performance"** in the **"Risk factors"** section of this report for more information

### Maturity analysis of assets and liabilities

The table on the following page provides an analysis of on- and off-balance sheet assets and liabilities by residual contractual maturity as of the balance sheet date. The contractual maturity of liabilities is based on carrying amounts and the earliest date on which we could be required to pay. The contractual maturity of assets is based on carrying amounts and the latest date the asset will mature. The presentation of liabilities at carrying value in this table differs from "Note 25d Maturity analysis of financial liabilities" in the "Consolidated financial statements" section of this report, where these liabilities are presented on an undiscounted basis, as required by International Financial Reporting Standards (IFRS).

Derivative replacement values and trading portfolio assets and liabilities are assigned to the column *Due within 1 month*, noting that the respective contractual maturities may extend over significantly longer periods.

Other financial assets and liabilities with no contractual maturity, such as equity securities, are included in the *Perpetual / Not applicable* time bucket. Undated or perpetual instruments are classified based on the contractual notice period that the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the *Perpetual / Not applicable* time bucket.

Non-financial assets and liabilities with no contractual maturity are generally included in the *Perpetual / Not applicable* time bucket.

Loan commitments are classified on the basis of the earliest date they can be drawn down.

## Maturity analysis of assets and liabilities

CHF billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 6 months	Due between 6 and 9 months	Due between 9 and 12 months	Due between 1 and 2 years	Due between 2 and 5 years	Due over 5 years	Perpetual / Not applicable	Total
<b>Assets</b>										
Cash and balances with central banks	87.7							0.1		87.8
Due from banks	12.4	0.7	0.3	0.2	0.1	0.1	0.0	0.0		13.7
Cash collateral on securities borrowed	12.4	0.0		0.0	0.0					12.4
Reverse repurchase agreements	40.9	21.7	5.8	4.2	2.6	1.6	0.4			77.2
Trading portfolio assets	130.7									130.7
Positive replacement values	118.2									118.2
Cash collateral receivables on derivative instruments	23.4									23.4
Loans	117.7	38.3	13.8	7.0	8.9	24.4	62.3	47.2		319.6
<i>of which: residential mortgages</i>	12.1	21.7	6.0	3.1	3.5	14.5	42.7	40.9		144.4
<i>of which: commercial mortgages</i>	3.6	5.5	1.2	0.4	0.5	1.5	3.9	2.1		18.7
<i>of which: Lombard loans</i>	88.7	9.1	4.9	2.8	3.3	2.4	3.5	0.2		115.0
<i>of which: other loans</i>	13.3	2.1	1.7	0.6	1.6	6.0	12.2	1.9		39.4
<i>of which: securities</i>								2.1		2.1
Financial assets designated at fair value	4.7	9.7	5.0	4.7	10.4	6.5	16.1	1.3	0.6	58.9
Financial assets available for sale	0.7	0.1	0.2	0.4	0.2	0.9	1.4	4.1	0.7	8.7
Financial assets held to maturity			0.7	1.2	0.7	1.5	2.0	3.1		9.2
Investments in associates									1.0	1.0
Property, equipment and software									8.8	8.8
Goodwill and intangible assets									6.4	6.4
Deferred tax assets									9.8	9.8
Other assets	25.3	0.1	0.0	0.0	0.1	0.1	2.2	1.9		29.7
<b>Total assets as of 31 December 2017</b>	<b>574.2</b>	<b>70.7</b>	<b>25.9</b>	<b>17.5</b>	<b>22.9</b>	<b>35.0</b>	<b>84.4</b>	<b>57.6</b>	<b>27.4</b>	<b>915.6</b>
<b>Total assets as of 31 December 2016</b>	<b>591.6</b>	<b>73.4</b>	<b>22.5</b>	<b>18.2</b>	<b>20.8</b>	<b>43.2</b>	<b>75.4</b>	<b>59.7</b>	<b>30.3</b>	<b>935.0</b>
<b>Liabilities</b>										
Due to banks	6.1	0.4	0.5	0.4	0.0	0.1	0.0	0.0		7.5
Cash collateral on securities lent	1.6	0.1								1.8
Repurchase agreements	11.8	2.8	0.3	0.2	0.1	0.0				15.3
Trading portfolio liabilities	30.5									30.5
Negative replacement values	116.1									116.1
Cash collateral payables on derivative instruments	30.2									30.2
Due to customers	393.0	10.2	2.8	1.8	0.5	0.3	0.3	0.1		409.0
Financial liabilities designated at fair value	18.6	10.2	5.5	2.5	3.2	3.5	4.5	6.2		54.2
Debt issued	4.0	14.1	21.8	10.9	10.8	9.5	33.0	27.9	7.6	139.6
Provisions	3.1									3.1
Other liabilities	52.3	2.9				0.5	0.2	0.3	1.0	57.1
<b>Total liabilities as of 31 December 2017</b>	<b>667.5</b>	<b>40.7</b>	<b>30.8</b>	<b>15.8</b>	<b>14.6</b>	<b>14.0</b>	<b>38.0</b>	<b>34.4</b>	<b>8.6</b>	<b>864.4</b>
<b>Total liabilities as of 31 December 2016</b>	<b>720.2</b>	<b>40.4</b>	<b>19.5</b>	<b>12.9</b>	<b>6.0</b>	<b>12.6</b>	<b>25.7</b>	<b>34.8</b>	<b>8.5</b>	<b>880.7</b>
<b>Guarantees, commitments and forward starting transactions</b>										
Loan commitments	38.6	0.2	0.1	0.0	0.0	0.1				39.1
Guarantees	18.8	0.0								18.9
Reverse repurchase agreements	12.7									12.7
Securities borrowing agreements	0.0									0.0
<b>Total as of 31 December 2017</b>	<b>70.1</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>		<b>70.6</b>
<b>Total as of 31 December 2016</b>	<b>81.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>		<b>81.4</b>

## Off-balance sheet

### Off-balance sheet arrangements

In the normal course of business, we enter into transactions that may not be recognized in whole or in part on our balance sheet in accordance with IFRS. These transactions include derivative instruments, guarantees and similar arrangements, as well as some purchased and retained interests in non-consolidated structured entities (SEs), which are transacted for a number of reasons, including hedging and market-making activities, to meet specific needs of our clients or to offer investment opportunities to clients through entities that are not controlled by us.

When we incur an obligation or become entitled to an asset through these arrangements, we recognize them on the balance sheet. It should be noted that in certain instances the amount recognized on the balance sheet does not represent the full gain or loss potential inherent in such arrangements.

→ **Refer to “Note 1a Significant accounting policies, items 1, 3a and 3d” and “Note 28 Interests in subsidiaries and other entities” in the “Consolidated financial statements” section of this report for more information**

The following paragraphs provide more information on several distinct off-balance sheet arrangements. Additional off-balance sheet information is primarily provided in Notes 12, 20, 23, 28 and 31 in the “Consolidated financial statements” section of this report, as well as in the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors).

### Risk disclosures, including our involvement with off-balance sheet vehicles

Refer to the “Risk management and control” section of this report for comprehensive credit, market and liquidity risk information related to our exposures, which includes exposures to off-balance sheet vehicles.

### Support provided to non-consolidated investment funds

In 2017, the Group did not provide material support, financial or otherwise, to unconsolidated investment funds when the Group was not contractually obligated to do so, nor does the Group have an intention to do so.

### Guarantees and similar arrangements

In the normal course of business, we issue various forms of guarantees, commitments to extend credit, standby and other letters of credit to support our clients, commitments to enter into forward starting transactions, note issuance facilities and revolving underwriting facilities. With the exception of related premiums, generally these guarantees and similar obligations are kept as off-balance sheet items unless a provision to cover probable losses is required.

As of 31 December 2017, the net exposure (gross values less sub-participations) from guarantees and similar instruments was CHF 16.0 billion compared with CHF 13.8 billion as of 31 December 2016. Fee income from issuing guarantees was not significant to total revenues in 2017 and 2016.

Guarantees represent irrevocable assurances that, subject to the satisfaction of certain conditions, we will make payments in the event that our clients fail to fulfill their obligations to third parties. We also enter into commitments to extend credit in the form of credit lines that are available to secure the liquidity needs of our clients. The majority of these unutilized credit lines range in maturity from one month to five years. If customers fail to meet their obligations, our maximum exposure to credit risk is the contractual amount of these instruments. The risk is similar to the risk involved in extending loan facilities and is subject to the same risk management and control framework. In 2017, we recognized a net credit loss recovery of CHF 21 million related to loan commitments and guarantees compared with a net credit loss expense of CHF 9 million in 2016. Provisions recognized for guarantees and loan commitments were CHF 33 million as of 31 December 2017 and CHF 54 million as of 31 December 2016.

→ **Refer to “Note 11 Allowances and provisions for credit losses” in the “Consolidated financial statements” section of this report for more information on provisions for loan commitments and guarantees**

For certain obligations, we enter into partial sub-participations to mitigate various risks from guarantees and loan commitments. A sub-participation is an agreement by another party to take a share of the loss in the event that the obligation is not fulfilled by the obligor and, where applicable, to fund a part of the credit facility. We retain the contractual relationship with the obligor, and the sub-participant has only an indirect relationship. We only enter into sub-participation agreements with banks to which we ascribe a credit rating equal to or better than that of the obligor.

Furthermore, we provide representations, warranties and indemnifications to third parties in the normal course of business.

## Guarantees, commitments and forward starting transactions

The table below shows the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

CHF million	31.12.17			31.12.16		
	Gross	Sub-participations	Net	Gross	Sub-participations	Net
<b>Guarantees</b>						
Credit guarantees and similar instruments	8,428	(433)	7,995	6,447	(424)	6,023
Performance guarantees and similar instruments	3,420	(823)	2,597	3,190	(696)	2,494
Documentary credits	7,007	(1,612)	5,395	7,074	(1,761)	5,313
<b>Total guarantees</b>	<b>18,854</b>	<b>(2,867)</b>	<b>15,987</b>	16,711	(2,881)	13,830
<b>Loan commitments</b>	<b>39,069</b>	<b>(1,074)</b>	<b>37,995</b>	54,430	(1,513)	52,917
<b>Forward starting transactions<sup>1</sup></b>						
Reverse repurchase agreements	12,683			10,178		
Securities borrowing agreements	23			36		
Repurchase agreements	8,187			5,984		

<sup>1</sup> Cash to be paid in the future by either UBS or the counterparty.

### Clearing house and exchange memberships

We are a member of numerous securities and derivative exchanges and clearing houses. In connection with some of those memberships, we may be required to pay a share of the financial obligations of another member who defaults or we may be otherwise exposed to additional financial obligations. While the membership rules vary, obligations generally would arise only if the exchange or clearing house had exhausted its resources. We consider the probability of a material loss due to such obligations to be remote.

### Deposit insurance

Swiss banking law and the deposit insurance system require Swiss banks and securities dealers to jointly guarantee an amount of up to CHF 6 billion for privileged client deposits in the event that a Swiss bank or securities dealer becomes insolvent. FINMA estimates our share in the deposit insurance system to be CHF 0.9 billion.

As a member of the Deposit Protection Fund of the Association of German Banks (the Fund), we are required to provide an indemnity to the Fund related to its coverage of certain non-institutional deposits for amounts above EUR 0.1 million and below EUR 261 million per depositor in the event that a German bank becomes unable to meet its obligations.

The aforementioned deposit insurance requirements represent a contingent payment obligation and expose us to additional risk. As of 31 December 2017, we considered the probability of a material loss from our obligations to be remote.

### Contractual obligations

The table below summarizes payments due by period under contractual obligations as of 31 December 2017.

All contractual obligations included in this table, with the exception of purchase obligations (i.e., those in which we are

committed to purchasing determined volumes of goods and services), are either recognized as liabilities on our balance sheet or, in the case of operating leases, disclosed in "Note 31 Operating leases and finance leases" in the "Consolidated financial statements" section of this report.

### Contractual obligations

CHF million	Payment due by period				Total
	Within 1 year	1–3 years	3–5 years	Over 5 years	
Long-term debt obligations	53,671	34,431	25,203	45,172	158,476
Finance lease obligations	3	5	0	18	26
Operating lease obligations	666	1,118	811	2,013	4,608
Purchase obligations	1,229	1,049	320	220	2,819
<b>Total as of 31 December 2017</b>	<b>55,569</b>	<b>36,604</b>	<b>26,335</b>	<b>47,422</b>	<b>165,929</b>

Long-term debt obligations as of 31 December 2017 were CHF 158 billion. They consisted of financial liabilities designated at fair value (CHF 56 billion) and long-term debt issued (CHF 102 billion) and represent estimated future interest and principal payments on an undiscounted basis.

→ Refer to "Note 25d Maturity analysis of financial liabilities" in the "Consolidated financial statements" section of this report for more information

Approximately half of total long-term debt obligations had a variable rate of interest. Amounts due on interest rate swaps used to hedge interest rate risk inherent in fixed-rate debt issued, and designated in fair value hedge accounting relationships, are not included in the table above. The notional amount of these interest rate swaps was CHF 60 billion as of 31 December 2017. Financial liabilities designated at fair value mostly consist of structured notes and are generally economically hedged, but it would not be practicable to

estimate the amount and / or timing of the payments on interest swaps used to hedge these instruments as interest rate risk inherent in respective liabilities is generally risk managed on a portfolio level.

Within purchase obligations, the obligation to employees under mandatory notice periods is excluded (i.e., the period in which we must pay contractually agreed salaries to employees leaving the firm).

Our liabilities recognized on the balance sheet as *Due to banks, Cash collateral on securities lent, Repurchase agreements, Trading portfolio liabilities, Negative replacement values, Cash collateral payables on derivative instruments, Due to customers, Provisions and Other liabilities* are excluded from the table above.

→ Refer to the respective Notes in the "Consolidated financial statements" section of this report for more information

# Currency management

## Strategy, objectives and governance

Our Group currency management activities are designed to reduce adverse currency effects on our reported financial results in Swiss francs, within limits set by the BoD. Group ALM focuses on three principal areas of currency risk management: (i) currency-matched funding and investment of non-Swiss franc assets and liabilities, (ii) sell-down of non-Swiss franc profits and losses and (iii) selective hedging of anticipated non-Swiss franc profits and losses. Non-trading foreign exchange risks arising on transactions denominated in a currency other than the reporting entity's functional currency are managed under market risk limits. Activities performed by Group ALM include the management of the structural currency composition at the consolidated Group level.

### Currency-matched funding and investment of non-Swiss franc assets and liabilities

For monetary balance sheet items and non-core investments, as far as it is practical and efficient, we follow the principle of matching the currencies of our assets and liabilities for funding purposes. This avoids profits and losses arising from the translation of non-Swiss franc assets and liabilities.

Net investment hedge accounting is applied to non-Swiss franc core investments to balance the effect of foreign exchange movements on both common equity tier 1 (CET1) capital and the CET1 capital ratio on a fully applied basis.

→ Refer to "Note 1a Significant accounting policies" and "Note 12 Derivative instruments and hedge accounting" in the "Consolidated financial statements" section of this report for more information

### Sell-down of non-Swiss franc reported profits and losses

Income statement items of foreign subsidiaries and branches with a functional currency other than the Swiss franc are translated into Swiss francs on a monthly basis using the relevant month-end rate. To reduce earnings volatility on the translation of previously recognized earnings in foreign currencies, Group ALM centralizes the profits and losses arising in UBS AG and its branches and sells or buys the profit or loss for Swiss francs. Our foreign subsidiaries follow a similar monthly sell-down process into their own functional currencies. Retained earnings in foreign subsidiaries with a functional currency other than the Swiss franc are integrated and managed as part of our net investment hedge accounting program.

### Hedging of anticipated non-Swiss franc profits and losses

The Group ALCO may at any time instruct Group ALM to execute hedges to protect anticipated future profits and losses in foreign currencies against possible adverse trends of foreign exchange rates. Although intended to hedge future earnings, these transactions are accounted for as open currency positions and are subject to internal market risk limits for value-at-risk and stress loss limits.

→ Refer to the "Capital management" section of this report for more information on our active management of sensitivity to currency movements and its effect on our key ratios

## Cash flows

As a global financial institution, our cash flows are complex and often may bear little relation to our net earnings and net assets. Consequently, we believe that a traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity, funding and capital management frameworks and measures described elsewhere in the "Risk, treasury and capital management" section of this report.

### Cash and cash equivalents

As of 31 December 2017, cash and cash equivalents totaled CHF 102.2 billion, a decrease of CHF 18.9 billion from 31 December 2016, driven by net cash outflows from operating activities, partly offset by net cash inflows from financing activities.

### Operating activities

In 2017, net cash outflows from operating activities were CHF 50.9 billion. Net operating cash flow, before changes in operating assets and liabilities and income taxes paid, was an inflow of CHF 7.0 billion. Changes in operating assets and liabilities resulted in net cash outflows of CHF 56.9 billion, mainly driven by a CHF 21.8 billion net outflow related to trading portfolio activity, a CHF 14.2 billion net increase in lending balances and a CHF 12.7 billion net decrease in customer deposits.

In 2016, net cash outflows from operating activities were CHF 16.5 billion, mainly due to the increase of financial assets designated at fair value of CHF 60.7 billion, substantially due to cash proceeds from reductions of debt securities classified as *Financial assets available for sale*, which triggered cash inflows from investing activities. These proceeds were used for purchases of similar debt instruments classified under the fair value option, which are presented in operating activities. This effect was partly offset by inflows related to an increase in customer deposits of CHF 33.6 billion and net operating cash flow, before changes in operating assets and liabilities and income taxes paid, of CHF 12.5 billion.

### Investing activities

Investing activities resulted in a net cash inflow of CHF 5.1 billion in 2017, primarily related to gross cash inflows of CHF 14.9 billion from the disposal and redemption of financial assets available for sale, partly offset by gross cash outflows of CHF 8.4 billion related to the purchase of financial assets available for sale.

In 2016, investing activities generated a net cash inflow of CHF 36.3 billion, as disposals and redemptions of financial assets available for sale exceeded purchases of financial assets available for sale and financial assets held to maturity.

### Financing activities

Financing activities resulted in a net cash inflow of CHF 26.6 billion in 2017, mainly due to the net issuance of CHF 24.1 billion of short-term debt and CHF 6.2 billion of long-term debt, which includes financial liabilities designated at fair value, partly offset by a dividend distribution to shareholders of CHF 2.2 billion.

In 2016, financing activities resulted in a net cash outflow of CHF 1.0 billion, primarily due to a dividend distribution to shareholders of CHF 3.2 billion, payments of CHF 1.4 billion to holders of preferred notes and net cash of CHF 1.2 billion used to acquire treasury shares, largely offset by the net issuance of CHF 5.4 billion of short-term debt.

### Statement of cash flows (condensed)

	For the year ended	
<i>CHF million</i>	<b>31.12.17</b>	31.12.16
Net cash flow from / (used in) operating activities	<b>(50,911)</b>	(16,457)
Net cash flow from / (used in) investing activities	<b>5,100</b>	36,328
Net cash flow from / (used in) financing activities	<b>26,608</b>	(972)
Effects of exchange rate differences on cash and cash equivalents	<b>265</b>	(806)
<b>Net increase / (decrease) in cash and cash equivalents</b>	<b>(18,938)</b>	18,094
<b>Cash and cash equivalents at the end of the year</b>	<b>102,200</b>	121,138



# Capital management

## Capital management objectives, planning and activities

### Capital management objectives

**Audited I** An adequate level of total loss-absorbing capacity (TLAC) in accordance with both our internal assessment and regulatory requirements is a prerequisite to conducting our business activities. ▲ We are therefore committed to maintaining a strong TLAC position and sound TLAC ratios at all times in order to meet regulatory capital requirements and our target capital ratios, and to support the growth of our businesses.

We expect to meet known future increases in TLAC requirements mainly through a combination of retaining earnings and issuing high-trigger loss-absorbing additional tier 1 (AT1) capital instruments, including Deferred Contingent Capital Plan (DCCP) employee compensation awards, as well as issuing senior unsecured debt that contributes to our TLAC.

As of 31 December 2017, our fully applied common equity tier 1 (CET1) capital ratio and our fully applied CET1 leverage ratio were 13.8% and 3.7%, respectively, each of which is above the requirements for Swiss systemically relevant banks (SRBs), which are stricter than the Basel Committee on Banking Supervision (BCBS) requirements and which will apply from 1 January 2020.

In December 2017, the BCBS announced the finalization of the Basel III framework. As a result, we have provided updated capital guidance for the 2018–2020 period. We plan to operate with a fully applied CET1 capital ratio of around 13% and a fully applied CET1 leverage ratio of around 3.7%.

We currently estimate that the introduction of the revised Basel III framework will likely lead to a further net increase in risk-weighted assets (RWA) of around CHF 35 billion, before taking into account mitigation actions. These estimates are based on our current understanding of the relevant standards and may change as a result of new or changed regulatory interpretations, implementation of the Basel III standards into national law, changes in business growth, market conditions and other factors. We plan to update our guidance on CET1 ratios when further details on the final implementation of the new Basel III rules into national law are available.

In addition, over the next three years, as a result of other known regulatory changes and estimated business growth, we estimate our RWA may increase by around CHF 40 billion and our leverage ratio denominator (LRD) by around CHF 85 billion. Actual increases may vary depending on growth opportunities, market conditions and mitigation actions. As a consequence, and based on the estimates above, we may build approximately CHF 4 billion of additional fully applied CET1 capital over the next three years, subject to market conditions, as well as RWA and LRD development.

We believe that our capital strength is a source of confidence for our stakeholders, contributes to our strong credit ratings and is the foundation of our success.

- **Refer to the “Our strategy” section of this report for more information on our updated capital guidance**
- **Refer to “Finalization of the Basel III capital framework” in the “Regulatory and legal developments” section of this report for more information on changes to our regulatory capital requirements**
- **Refer to “Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly” in the “Risk factors” section of this report for more information on the risks related to our capital ratios**

### Capital planning and activities

**Audited I** We manage our balance sheet, RWA, LRD and TLAC ratio levels within our internal limits and targets and on the basis of our regulatory TLAC requirements. Our strategic focus is set on achieving an optimal attribution and use of financial resources between our business divisions and Corporate Center, as well as between our legal entities, while remaining within the limits defined for the Group and allocated to the business divisions by the Board of Directors (BoD). These resource allocations, in turn, affect business plans and earnings projections, which are reflected in our capital plans.

The annual strategic planning process includes a capital-planning component that is key in defining medium- and longer-term capital targets. It is based on an attribution of Group RWA and LRD internal limits to the business divisions.

Limits and targets are established at both the Group and business division levels, and are submitted to the BoD for approval at least annually. In the target-setting process, we take into account the current and potential future TLAC requirements, our aggregate risk exposure in terms of capital-at-risk, the assessment by rating agencies, comparisons with peers and the effect of expected accounting policy changes.▲ Monitoring is based on these internal limits and targets and provides indications if changes are required. Any breach of the limits in place triggers the imposition of a series of required remediating actions.

Group Treasury plans for, and monitors, consolidated TLAC information on an ongoing basis, also considering developments in capital regulations. In addition, capital planning and monitoring are performed at the legal entity level for our significant subsidiaries that are subject to prudential supervision and must meet capital and other supervisory requirements.

**Audited I** In 2017, we continued to focus on meeting the Swiss SRB fully applied capital requirements, which will go into effect from 1 January 2020. Therefore, we executed a series of transactions, including:

- the issuance of CHF 10.4 billion equivalent of TLAC-eligible senior unsecured debt
- the issuance of CHF 0.4 billion of high-trigger loss-absorbing AT1 capital instruments related to DCCP awards granted for the performance year 2017
- the call of CHF 2.7 billion equivalent of non-Basel III-compliant tier 1 and tier 2 capital instruments.▲

As of 31 December 2017, these transactions contributed to our fully applied TLAC ratio amounting to 33.0% of our RWA and 8.8% of our LRD compared with the respective minimum requirements of 26.6%, excluding countercyclical buffer requirements, and 9.3%, which are applicable as of 1 January 2020.

- **Refer to “Equity attribution and return on attributed equity” in this section for more information on how equity is attributed to our business divisions**
- **Refer to “Capital and capital ratios of our significant regulated subsidiaries” in this section for more information**

## Swiss SRB total loss-absorbing capacity framework

Disclosures in this section are provided for UBS Group AG on a consolidated basis and focus on information in accordance with the Basel III framework as applicable to Swiss systemically relevant banks (SRBs).

Information in accordance with the Basel Committee on Banking Supervision (BCBS) framework, including requirements for global systemically important banks as of 31 December 2017 for UBS Group AG consolidated, is provided in the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors).

Capital and other regulatory information as of 31 December 2017 for UBS AG consolidated is provided in the UBS Group AG and UBS AG Annual Report 2017 under “Annual reporting” at [www.ubs.com/investors](http://www.ubs.com/investors).

Capital and other regulatory information as of 31 December 2017 for UBS AG standalone, UBS Switzerland AG standalone, UBS Limited standalone and UBS Americas Holding LLC consolidated is provided in the “Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups” section of this report and in the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors).

### Regulatory framework

The Basel III framework came into effect in Switzerland on 1 January 2013 and is embedded in the Swiss Capital Adequacy Ordinance (CAO). The CAO also includes the too big to fail provisions applicable to Swiss SRBs, which became effective on 1 July 2016 and will be transitioned in until 1 January 2020.

Under the Swiss SRB framework, going and gone concern requirements represent the total loss-absorbing capacity (TLAC) requirement of the Group. TLAC encompasses regulatory capital, such as common equity tier 1 (CET1), loss-absorbing additional tier 1 (AT1) and tier 2 capital instruments, as well as liabilities that can be written down or converted into equity in case of resolution or for the purpose of restructuring measures.

### Common equity tier 1 capital

The Basel III framework includes prudential filters for the calculation of capital. These prudential filters consist mainly of capital deductions for deferred tax assets (DTAs) recognized for tax loss carry-forwards, DTAs on temporary differences that exceed a certain threshold and effects related to defined benefit plans. As these filters are being phased in between 2014 and 2018, their effects are gradually factored into our calculations of capital, risk-weighted assets (RWA) and capital ratios on a phase-in basis and are entirely reflected in our capital, RWA and capital ratios on a fully applied basis.

In 2017, we deducted from our phase-in CET1 capital 80% (in 2016: 60%) of: (i) DTAs recognized for tax loss carry-forwards, (ii) DTAs on temporary differences that exceed the threshold of 10% of CET1 capital before deductions for DTAs on temporary differences and (iii) net defined benefit pension plan assets. As of 31 December 2017, we deducted 80% (in 2016: 60%) of our goodwill from phase-in CET1 capital and 20% (in 2016: 40%) of our goodwill from loss-absorbing AT1 capital. Starting 1 January 2018, the aforementioned requirements are fully phased in.

### Capital and other instruments contributing to our total loss-absorbing capacity

In addition to CET1 capital, the following instruments contribute to our loss-absorbing capacity:

- Loss-absorbing AT1 capital instruments (high- and low-trigger)
- Loss-absorbing tier 2 capital instruments (high- and low-trigger)
- Non-Basel III-compliant tier 2 capital instruments
- TLAC-eligible senior unsecured debt instruments

Under the fully applied Swiss SRB rules, going concern capital includes CET1 and high-trigger loss-absorbing AT1 capital instruments. Under the transitional rules for the Swiss SRB framework, outstanding low-trigger loss-absorbing AT1 capital instruments are available to meet the going concern capital requirements until their first call date, even if the first call date is after 31 December 2019. As of their first call date, these instruments are eligible to meet the gone concern requirements.

Outstanding high- and low-trigger loss-absorbing tier 2 capital instruments are available to meet the going concern capital requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019, and to meet gone concern requirements thereafter. Outstanding low-trigger loss-absorbing tier 2 capital instruments are subject to amortization starting five years prior to their maturity, with the amortized portion qualifying as gone concern loss-absorbing capacity.

Non-Basel III-compliant tier 2 capital instruments and TLAC-eligible senior unsecured debt instruments are eligible to meet gone concern requirements.

Instruments available to meet gone concern requirements are eligible until one year before maturity, with a haircut of 50% applied in the last year of eligibility.

- **Refer to “Bondholder information” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on the eligibility of capital and senior unsecured debt instruments and on key features and terms and conditions of capital instruments**

## Total loss-absorbing capacity and leverage ratio requirements

### Going concern capital requirements

Once the Swiss SRB requirements are fully implemented by 1 January 2020, total going concern minimum requirements for all Swiss SRBs are a capital ratio requirement of 12.86% of RWA and a leverage ratio requirement of 4.5%. In addition to these minimum requirements, an add-on reflecting the degree of systemic importance is applied based on market share and the leverage ratio denominator (LRD). The add-on for UBS is expected to be 1.44% of RWA and 0.5% of our LRD, resulting in total going concern capital requirements applicable starting as of 1 January 2020 of 14.3% of RWA (excluding countercyclical buffer requirements) and 5.0% of the LRD. Furthermore, of the total going concern capital requirement of 14.3% of RWA, at least 10% must be met with CET1 capital, while a maximum of 4.3% can be met with high-trigger loss-absorbing AT1 capital instruments. Similarly, of the total going concern leverage ratio requirement of 5.0%, 3.5% must be met with CET1 capital, while a maximum of 1.5% can be met with high-trigger loss-absorbing AT1 capital instruments.

National authorities can put in place a countercyclical buffer requirement of up to 2.5% of RWA for private sector credit exposures in their jurisdictions. The requirement must also be met with CET1 capital. The Swiss Federal Council has activated a countercyclical buffer requirement of 2% of RWA for mortgage loans on residential property in Switzerland, applicable since 30 June 2014. Furthermore, since 1 July 2016, we are required to apply additional countercyclical buffer requirements implemented in other Basel Committee member jurisdictions. The requirements will be phased in by and become fully effective on 1 January 2019. The effect as of 31 December 2017 was immaterial.

### Gone concern loss-absorbing capacity requirements

As an internationally active Swiss SRB, UBS is also subject to gone concern loss-absorbing capacity requirements. The gone concern requirements also include add-ons for market share and the LRD, and may be met with senior unsecured debt that is TLAC eligible.

Under the Swiss SRB framework, banks are eligible for a rebate on the gone concern requirement if they take actions that facilitate recovery and resolvability beyond the minimum requirements to ensure the integrity of systemically important functions in the case of an impending insolvency. In addition, in the event that certain low-trigger loss-absorbing AT1 or tier 2 capital instruments are used to meet the gone concern requirements, such requirements may be reduced by up to 2.86% for the RWA-based requirement and up to 1% for the LRD-based requirement. The combined reduction applied for resolvability measures and the aforementioned gone concern requirement reduction for use of low-trigger loss-absorbing AT1 and tier 2 capital instruments may not exceed 5.72% for the RWA-based requirement of 14.3% and 2% for the LRD-based requirement of 5%. The amount of the rebate for improved resolvability is assessed annually by FINMA. Based on actions we completed up to December 2016 to improve resolvability, FINMA granted a rebate on the gone concern requirement of 35% of the aforementioned maximum rebate in 2017, which resulted in a reduction of 2.0 percentage points for the RWA-based requirement and 0.7 percentage points for the LRD-based requirement. This rebate will be phased in until 1 January 2020, when UBS will be subject to a 12.3% RWA-based and 4.3% LRD-based gone concern requirement. As we complete additional measures to improve the resolvability of the Group, we expect to qualify for a larger rebate and therefore aim to operate with a gone concern ratio of less than 4% of the LRD upon completion of the phase-in period.

In this report, we refer to the RWA-based gone concern requirements as gone concern loss-absorbing capacity requirements, and the RWA-based gone concern ratio is referred to as the gone concern loss-absorbing capacity ratio.

## Swiss SRB going and gone concern requirements – time series<sup>1</sup>

	Risk-weighted assets (%)				Leverage ratio (%)			
	31.12.17	1.1.18	1.1.19	1.1.20	31.12.17	1.1.18	1.1.19	1.1.20
<b>Going concern</b>								
Minimum capital	8.00	8.00	8.00	8.00	3.00	3.00	3.00	3.00
Buffer capital including applicable add-ons <sup>2</sup>	4.22	4.86	5.58	6.30	0.50	1.00	1.50	2.00
<b>Total going concern</b>	<b>12.22</b>	<b>12.86</b>	<b>13.58</b>	<b>14.30</b>	<b>3.50</b>	<b>4.00</b>	<b>4.50</b>	<b>5.00</b>
<i>of which: common equity tier 1 capital<sup>2</sup></i>	<i>9.22</i>	<i>9.46</i>	<i>9.68</i>	<i>10.00</i>	<i>2.60</i>	<i>2.90</i>	<i>3.20</i>	<i>3.50</i>
<i>of which: maximum high-trigger loss-absorbing additional tier 1 capital</i>	<i>3.00</i>	<i>3.40</i>	<i>3.90</i>	<i>4.30</i>	<i>0.90</i>	<i>1.10</i>	<i>1.30</i>	<i>1.50</i>
<b>Gone concern</b>								
Base requirement including applicable add-ons and rebate	5.33	7.65	9.98	12.30	1.72	2.58	3.44	4.30
<b>Total gone concern</b>	<b>5.33</b>	<b>7.65</b>	<b>9.98</b>	<b>12.30</b>	<b>1.72</b>	<b>2.58</b>	<b>3.44</b>	<b>4.30</b>
<b>Total loss-absorbing capacity</b>	<b>17.55</b>	<b>20.51</b>	<b>23.56</b>	<b>26.60</b>	<b>5.22</b>	<b>6.58</b>	<b>7.94</b>	<b>9.30</b>

<sup>1</sup> This table includes a rebate equal to 35% of the maximum rebate on the gone concern requirements, which was granted by FINMA due to improved resolvability. This resulted in a reduction of 2.0 percentage points for the RWA-based requirement and 0.7 percentage points for the LRD-based requirement and will be phased in until 1 January 2020. This table does not include a rebate for the usage of low-trigger loss-absorbing additional tier 1 or tier 2 capital instruments to meet the gone concern requirements. <sup>2</sup> Going concern capital ratio requirements as of 31 December 2017 include a countercyclical buffer requirement of 0.22%. Requirements for subsequent periods exclude the effect of the countercyclical buffer requirement, as potential future countercyclical buffer requirements are not yet known.

Swiss SRB going and gone concern requirements and information<sup>1</sup>

As of 31.12.17	Swiss SRB, including transitional arrangements (phase-in)							
	RWA				LRD			
	Requirement (%)	Actual (%)	Requirement	Eligible	Requirement (%)	Actual (%)	Requirement	Eligible
<i>CHF million, except where indicated</i>								
Common equity tier 1 capital	9.22	14.89	21,974	35,494	2.60	4.00	23,079	35,494
Maximum high-trigger loss-absorbing additional tier 1 capital <sup>2,3</sup>	3.00	6.82	7,152	16,254	0.90	1.83	7,989	16,254
<i>of which: high-trigger loss-absorbing additional tier 1 capital</i>		2.88		6,857		0.77		6,857
<i>of which: low-trigger loss-absorbing additional tier 1 capital</i>		0.46		1,087		0.12		1,087
<i>of which: high-trigger loss-absorbing tier 2 capital</i>		0.18		435		0.05		435
<i>of which: low-trigger loss-absorbing tier 2 capital</i>		3.30		7,874		0.89		7,874
<b>Total going concern capital</b>	<b>12.22<sup>4</sup></b>	<b>21.71</b>	<b>29,126</b>	<b>51,748</b>	<b>3.50<sup>5</sup></b>	<b>5.83</b>	<b>31,067</b>	<b>51,748</b>
Base gone concern loss-absorbing capacity, including applicable add-ons and rebate	5.33 <sup>6</sup>	11.87	12,711	28,300	1.72 <sup>6</sup>	3.19	15,267	28,300
<b>Total gone concern loss-absorbing capacity</b>	<b>5.33</b>	<b>11.87</b>	<b>12,711</b>	<b>28,300</b>	<b>1.72</b>	<b>3.19</b>	<b>15,267</b>	<b>28,300</b>
<b>Total loss-absorbing capacity</b>	<b>17.55</b>	<b>33.58</b>	<b>41,837</b>	<b>80,048</b>	<b>5.22</b>	<b>9.02</b>	<b>46,335</b>	<b>80,048</b>

As of 31.12.17	Swiss SRB as of 1.1.20 (fully applied)							
	RWA				LRD			
	Requirement (%)	Actual (%)	Requirement	Eligible	Requirement (%)	Actual (%)	Requirement	Eligible
<i>CHF million, except where indicated</i>								
Common equity tier 1 capital	10.22	13.76	24,266	32,671	3.50	3.69	31,014	32,671
Maximum high-trigger loss-absorbing additional tier 1 capital <sup>2</sup>	4.30	3.89	10,212	9,240	1.50	1.04	13,292	9,240
<i>of which: high-trigger loss-absorbing additional tier 1 capital</i>		2.89		6,857		0.77		6,857
<i>of which: low-trigger loss-absorbing additional tier 1 capital</i>		1.00		2,383		0.27		2,383
<b>Total going concern capital</b>	<b>14.52<sup>7</sup></b>	<b>17.65</b>	<b>34,478</b>	<b>41,911</b>	<b>5.00<sup>8</sup></b>	<b>4.73</b>	<b>44,306</b>	<b>41,911</b>
Base gone concern loss-absorbing capacity, including applicable add-ons and rebate	12.30 <sup>9</sup>	15.32	29,207	36,392	4.30 <sup>9</sup>	4.11	38,103	36,392
<b>Total gone concern loss-absorbing capacity</b>	<b>12.30</b>	<b>15.32</b>	<b>29,207</b>	<b>36,392</b>	<b>4.30</b>	<b>4.11</b>	<b>38,103</b>	<b>36,392</b>
<b>Total loss-absorbing capacity</b>	<b>26.82</b>	<b>32.97</b>	<b>63,685</b>	<b>78,303</b>	<b>9.30</b>	<b>8.84</b>	<b>82,409</b>	<b>78,303</b>

<sup>1</sup> This table includes a rebate equal to 35% of the maximum rebate on the gone concern requirements, which was granted by FINMA. This resulted in a reduction of 2.0 percentage points for the RWA-based requirement and 0.7 percentage points for the LRD-based requirement and will be phased in until 1 January 2020. This table does not include a rebate for the usage of low-trigger loss-absorbing additional tier 1 or tier 2 capital instruments to meet the gone concern requirements. <sup>2</sup> Includes outstanding low-trigger loss-absorbing additional tier 1 (AT1) capital instruments, which are available under the transitional rules of the Swiss SRB framework to meet the going concern requirements until their first call date, even if the first call date is after 31 December 2019. As of their first call date, these instruments are eligible to meet the gone concern requirements. Low-trigger loss-absorbing AT1 capital was partly offset by required deductions for goodwill on a phase-in basis. <sup>3</sup> Includes outstanding high- and low-trigger loss-absorbing tier 2 capital instruments, which are available under the transitional rules of the Swiss SRB framework to meet the going concern requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019, and to meet gone concern requirements thereafter. Outstanding low-trigger loss-absorbing tier 2 capital instruments are subject to amortization starting five years prior to their maturity, with the amortized portion qualifying as gone concern loss-absorbing capacity. Instruments available to meet gone concern requirements are eligible until one year before maturity, with a haircut of 50% applied in the last year of eligibility. <sup>4</sup> Consists of a minimum capital requirement of 8% and a buffer capital requirement of 4.22%, including the effect of countercyclical buffers of 0.22%. <sup>5</sup> Consists of a minimum leverage ratio requirement of 3% and a buffer leverage ratio requirement of 0.5%. <sup>6</sup> Includes applicable add-ons of 0.36% for RWA and 0.13% for leverage ratio denominator and a rebate of 0.87% for RWA and 0.28% for LRD. <sup>7</sup> Consists of a minimum capital requirement of 8% and a buffer capital requirement of 6.52%, including the effect of countercyclical buffers of 0.22% and applicable add-ons of 1.44%. <sup>8</sup> Consists of a minimum leverage ratio requirement of 3% and a buffer leverage ratio requirement of 2%, including applicable add-ons of 0.5%. <sup>9</sup> Includes applicable add-ons of 1.44% for RWA and 0.5% for LRD and a rebate of 2% for RWA and 0.7% for LRD.

## Total loss-absorbing capacity

### Swiss SRB going and gone concern information

CHF million, except where indicated	Swiss SRB, including transitional arrangements (phase-in)		Swiss SRB as of 1.1.20 (fully applied)	
	31.12.17	31.12.16	31.12.17	31.12.16
<b>Going concern capital</b>				
<b>Common equity tier 1 capital</b>	<b>35,494</b>	37,788	<b>32,671</b>	30,693
High-trigger loss-absorbing additional tier 1 capital	<b>6,857</b>	6,512 <sup>1</sup>	<b>6,857</b>	6,809
Low-trigger loss-absorbing additional tier 1 capital	<b>1,087<sup>1</sup></b>	0 <sup>1</sup>	<b>2,383</b>	2,342
<b>Total loss-absorbing additional tier 1 capital</b>	<b>7,944</b>	6,512	<b>9,240</b>	9,151
<b>Total tier 1 capital</b>	<b>43,438</b>	44,299	<b>41,911</b>	39,844
High-trigger loss-absorbing tier 2 capital	<b>435</b>	891		
Low-trigger loss-absorbing tier 2 capital	<b>7,874<sup>2</sup></b>	10,402		
<b>Total tier 2 capital</b>	<b>8,309</b>	11,293		
<b>Total going concern capital</b>	<b>51,748</b>	55,593	<b>41,911</b>	39,844
<b>Gone concern loss-absorbing capacity<sup>3</sup></b>				
Non-Basel III-compliant tier 1 capital <sup>4</sup>	<b>0</b>	642	<b>0</b>	642
<b>Total tier 1 capital</b>	<b>0</b>	642	<b>0</b>	642
High-trigger loss-absorbing tier 2 capital			<b>218</b>	679
Low-trigger loss-absorbing tier 2 capital	<b>378<sup>2</sup></b>		<b>8,252</b>	10,402
Non-Basel III-compliant tier 2 capital <sup>4</sup>	<b>689</b>	698	<b>689</b>	698
<b>Total tier 2 capital</b>	<b>1,067</b>	698	<b>9,159</b>	11,779
<b>TLAC-eligible senior unsecured debt</b>	<b>27,233</b>	16,890	<b>27,233</b>	16,890
<b>Total gone concern loss-absorbing capacity</b>	<b>28,300</b>	18,229	<b>36,392</b>	29,311
<b>Total loss-absorbing capacity</b>				
<b>Total loss-absorbing capacity</b>	<b>80,048</b>	73,822	<b>78,303</b>	69,154
<b>Risk-weighted assets / leverage ratio denominator</b>				
Risk-weighted assets	<b>238,394</b>	225,412	<b>237,494</b>	222,677
Leverage ratio denominator	<b>887,635</b>	874,925	<b>886,116</b>	870,470
<b>Capital and loss-absorbing capacity ratios (%)</b>				
Going concern capital ratio	<b>21.7</b>	24.7	<b>17.6</b>	17.9
<i>of which: common equity tier 1 capital ratio</i>	<b>14.9</b>	<b>16.8</b>	<b>13.8<sup>5</sup></b>	<b>13.8</b>
Gone concern loss-absorbing capacity ratio	<b>11.9</b>	8.1	<b>15.3</b>	13.2
Total loss-absorbing capacity ratio	<b>33.6</b>	32.7	<b>33.0</b>	31.1
<b>Leverage ratios (%)</b>				
Going concern leverage ratio	<b>5.8</b>	6.4	<b>4.7</b>	4.6
<i>of which: common equity tier 1 leverage ratio</i>	<b>4.0</b>	<b>4.3</b>	<b>3.7</b>	<b>3.5</b>
Gone concern leverage ratio	<b>3.2</b>	2.1	<b>4.1</b>	3.4
Total loss-absorbing capacity leverage ratio	<b>9.0</b>	8.4	<b>8.8</b>	7.9

<sup>1</sup> High-trigger loss-absorbing additional tier 1 (AT1) capital (31 December 2016: CHF 6,809 million) and low-trigger loss-absorbing AT1 capital (31 December 2017: CHF 2,383 million; 31 December 2016: CHF 2,342 million) were partly offset by required deductions for goodwill (31 December 2017: CHF 1,296 million; 31 December 2016: CHF 2,639 million). <sup>2</sup> Outstanding low-trigger loss-absorbing tier 2 capital instruments are subject to amortization starting five years prior to their maturity, with the amortized portion qualifying as gone concern loss-absorbing capacity. <sup>3</sup> Instruments available to meet gone concern requirements are eligible until one year before maturity, with a haircut of 50% applied in the last year of eligibility. <sup>4</sup> Non-Basel III-compliant tier 1 and tier 2 capital instruments qualify as gone concern instruments. <sup>5</sup> Our post-stress CET1 capital ratio exceeded the 10% objective as of 31 December 2017.

Audited I

## Reconciliation of IFRS equity to Swiss SRB common equity tier 1 capital

CHF million	Swiss SRB, including transitional arrangements (phase-in)		Swiss SRB as of 1.1.20 (fully applied)	
	31.12.17	31.12.16	31.12.17	31.12.16
<b>Total IFRS equity</b>	<b>51,271</b>	54,302	<b>51,271</b>	54,302
Equity attributable to non-controlling interests	(57)	(682)	(57)	(682)
Deferred tax assets recognized for tax loss carry-forwards <sup>1</sup>	(4,637)	(5,042)	(5,797)	(8,403)
Deferred tax assets on temporary differences, excess over threshold	(489)	(741)	(857)	(1,835)
Goodwill, net of tax <sup>1,2</sup>	(5,183)	(3,959)	(6,479)	(6,599)
Intangible assets, net of tax	(214)	(241)	(214)	(241)
Compensation-related components (not recognized in net profit)	(1,620)	(1,589)	(1,620)	(1,589)
Expected losses on advanced internal ratings-based portfolio less general provisions	(634)	(356)	(634)	(356)
Unrealized (gains) / losses from cash flow hedges, net of tax	(351)	(972)	(351)	(972)
Unrealized own credit related to financial liabilities designated at fair value, net of tax, and replacement values	133	(294)	133	(294)
Unrealized gains related to financial assets available for sale, net of tax	(193)	(262)	(193)	(262)
Prudential valuation adjustments	(59)	(68)	(59)	(68)
Consolidation scope	(44)	(129)	(44)	(129)
Accruals for proposed dividends to shareholders	(2,438)	(2,250)	(2,438)	(2,250)
Other	10	71	10	71
<b>Total common equity tier 1 capital</b>	<b>35,494</b>	37,788	<b>32,671</b>	30,693

<sup>1</sup> As of 31 December 2017, the phase-in deduction applied was 80%; as of 31 December 2016, the phase-in deduction applied was 60%. <sup>2</sup> Includes goodwill related to significant investments in financial institutions of CHF 350 million (31 December 2016: CHF 342 million).

Risk, treasury and capital management

## Total loss-absorbing capacity and movement

### Going concern capital and movement

**Audited I** Our CET1 capital mainly consists of share capital, share premium, which primarily consists of additional paid-in capital related to shares issued, and retained earnings. A detailed reconciliation of IFRS equity to CET1 capital is provided in the "Reconciliation of IFRS equity to Swiss SRB common equity tier 1 capital" table.

Our fully applied CET1 capital increased by CHF 2.0 billion to CHF 32.7 billion as of 31 December 2017, mainly as a result of operating profit before tax, partly offset by accruals for capital returns to shareholders. Our loss-absorbing additional tier 1 capital remained at CHF 9.2 billion, unchanged from 31 December 2016, as a CHF 0.4 billion increase related to Deferred Contingent Capital Plan (DCCP) awards granted for the performance year 2017 was offset by currency effects. ▲

### Gone concern loss-absorbing capacity and movement

**Audited I** Our fully applied total gone concern loss-absorbing capacity increased by CHF 7.1 billion to CHF 36.4 billion as of 31 December 2017, including CHF 27.2 billion of TLAC-eligible senior unsecured debt. ▲ This was primarily driven by the issuance of CHF 10.4 billion TLAC-eligible senior unsecured debt, partly offset by a CHF 3.3 billion decrease mainly resulting from the call of a low-trigger tier 2 capital instrument equivalent to CHF 2.0 billion, the call of a CHF 0.7 billion non-Basel III-compliant tier 1 capital instrument and CHF 0.4 billion related to the decrease in eligibility of certain DCCP awards due to the shortening of the residual tenor.

### Loss-absorbing capacity and leverage ratios

Our fully applied CET1 capital ratio was 13.8%, unchanged from 31 December 2016, exceeding our 2017 target ratio of 13.0%, reflecting a CHF 2.0 billion increase in CET1 capital and a CHF 14.8 billion increase in risk-weighted assets (RWA). The net write-down of deferred tax assets (DTAs) following a reduction in the US federal corporate tax rate after the enactment of the Tax Cuts and Jobs Act in the US during the fourth quarter of 2017 had a negligible effect on this ratio.

Our fully applied CET1 leverage ratio increased 0.2 percentage points to 3.7% as of 31 December 2017, reflecting the aforementioned increase in CET1 capital, partly offset by a CHF 16 billion increase in the leverage ratio denominator (LRD).

On a fully applied basis, our gone concern loss-absorbing capacity ratio increased 2.1 percentage points to 15.3%, primarily driven by the aforementioned issuance of TLAC-eligible senior unsecured debt. Our gone concern leverage ratio on a fully applied basis increased 0.7 percentage points to 4.1% due to the aforementioned increase in the gone concern loss-absorbing capacity, partly offset by the higher LRD.

→ **Refer to the "Regulatory and legal developments" section of this report for more information on the significant tax law changes enacted in the US**

## Swiss SRB total loss-absorbing capacity movement

<i>CHF million</i>	Swiss SRB, including transitional arrangements (phase-in)	Swiss SRB as of 1.1.20 (fully applied)
<b>Going concern capital</b>		
<b>Common equity tier 1 capital as of 31.12.16</b>	<b>37,788</b>	<b>30,693</b>
Operating profit before tax	5,268	5,268
Net (profit) / loss attributable to non-controlling interests	(76)	(76)
Current tax (expense) / benefit	(875)	(875)
Deferred tax assets recognized for tax loss carry-forwards, additional phase-in effect	(1,681)	
Deferred tax assets recognized for temporary differences, additional phase-in effect	(547)	
Goodwill, additional phase-in effect	(1,320)	
Deferred tax assets recognized for tax loss carry-forwards	(432)	
Deferred tax assets recognized for temporary differences	(79)	100
Foreign currency translation effects	(302)	(186)
Expected loss on advanced IRB portfolio less general provisions	(278)	(278)
Compensation-related capital and share premium components	(28)	(28)
Defined benefit plans	263	263
Own credit risk related to derivative liabilities	101	101
Consolidation scope	85	85
Accruals for proposed dividends to shareholders	(2,438)	(2,438)
Other	45	42
<b>Common equity tier 1 capital as of 31.12.17</b>	<b>35,494</b>	<b>32,671</b>
<b>Loss-absorbing additional tier 1 capital as of 31.12.16</b>	<b>6,512</b>	<b>9,151</b>
Goodwill, additional phase-in effect	1,320	
Issuance of high-trigger loss-absorbing additional tier 1 capital	383	383
Foreign currency translation and other effects	(270)	(294)
<b>Loss-absorbing additional tier 1 capital as of 31.12.17</b>	<b>7,944</b>	<b>9,240</b>
<b>Tier 2 capital as of 31.12.16</b>	<b>11,293</b>	
Call of a low-trigger loss-absorbing tier 2 capital instrument	(1,982)	
Amortization due to shortening residual tenor	(380)	
Amortization of Deferred Contingent Capital Plan (DCCP)	(398)	
Foreign currency translation and other effects	(225)	
<b>Tier 2 capital as of 31.12.17</b>	<b>8,309</b>	
<b>Total going concern capital as of 31.12.16</b>	<b>55,593</b>	<b>39,844</b>
<b>Total going concern capital as of 31.12.17</b>	<b>51,748</b>	<b>41,911</b>
<b>Gone concern loss-absorbing capacity</b>		
<b>Tier 1 capital as of 31.12.16</b>	<b>642</b>	<b>642</b>
Call of the non-Basel III-compliant tier 1 capital instrument	(687)	(687)
Foreign currency translation and other effects	45	45
<b>Tier 1 capital as of 31.12.17</b>	<b>0</b>	<b>0</b>
<b>Tier 2 capital as of 31.12.16</b>	<b>698</b>	<b>11,779</b>
Call of a low-trigger loss-absorbing tier 2 capital instrument	(1,982)	
Amortized portion, which qualifies as gone concern loss-absorbing capacity	380	
Decrease in eligibility due to shortening residual tenor (DCCP)		(446)
Foreign currency translation and other effects	(10)	(193)
<b>Tier 2 capital as of 31.12.17</b>	<b>1,067</b>	<b>9,159</b>
<b>TLAC-eligible senior unsecured debt as of 31.12.16</b>	<b>16,890</b>	<b>16,890</b>
Issuance of TLAC-eligible senior unsecured debt instruments	10,377	10,377
Foreign currency translation and other effects	(33)	(33)
<b>TLAC-eligible senior unsecured debt as of 31.12.17</b>	<b>27,233</b>	<b>27,233</b>
<b>Total gone concern loss-absorbing capacity as of 31.12.16</b>	<b>18,229</b>	<b>29,311</b>
<b>Total gone concern loss-absorbing capacity as of 31.12.17</b>	<b>28,300</b>	<b>36,392</b>
<b>Total loss-absorbing capacity</b>		
<b>Total loss-absorbing capacity as of 31.12.16</b>	<b>73,822</b>	<b>69,154</b>
<b>Total loss-absorbing capacity as of 31.12.17</b>	<b>80,048</b>	<b>78,303</b>



## Additional information

### Active management of sensitivity to currency movements

Corporate Center – Group Asset and Liability Management (Group ALM) is mandated to minimize adverse effects from changes in currency rates on our fully applied CET1 capital and CET1 capital ratio. A significant portion of our capital and RWA are denominated in US dollars, euros, British pounds and other foreign currencies. In order to hedge the CET1 capital ratio, CET1 capital needs to have foreign currency exposure, leading to currency sensitivity of CET1 capital. As a consequence, it is not possible to simultaneously fully hedge the capital and the capital ratio. As the proportion of RWA denominated in foreign currencies outweighs the capital in these currencies, a significant appreciation of the Swiss franc against these currencies could benefit our capital ratios, while a significant depreciation of the Swiss franc against these currencies could adversely affect our capital ratios. The Group Asset and Liability Management Committee, a committee of the Group Executive Board, can adjust the currency mix in capital, within limits set by the Board of Directors, to balance the effect of foreign exchange movements on the fully applied CET1 capital and capital ratio. Limits are in place for the sensitivity of both CET1 capital and the capital ratio to an appreciation or depreciation of 10% in the value of the Swiss franc against other currencies.

### Sensitivity to currency movements

#### Risk-weighted assets

We estimate that a 10% depreciation of the Swiss franc against other currencies would have increased our fully applied RWA by CHF 11 billion and our fully applied CET1 capital by CHF 1.2 billion as of 31 December 2017 (31 December 2016: CHF 10 billion and CHF 1.2 billion, respectively) and reduced our fully applied CET1 capital ratio by 11 basis points (31 December 2016: 7 basis points). Conversely, we estimate that a 10% appreciation of the Swiss franc against other currencies would have reduced our fully applied RWA by CHF 10 billion and our fully applied CET1 capital by CHF 1.1 billion (31 December 2016: CHF 9 billion and CHF 1.1 billion, respectively) and increased our fully applied CET1 capital ratio by 11 basis points (31 December 2016: 7 basis points).

### Leverage ratio denominator

Our leverage ratio is also sensitive to foreign exchange movements due to the currency mix of our capital and LRD. When adjusting the currency mix in capital, potential effects on the going concern leverage ratio are taken into account and the sensitivity of the going concern leverage ratio to an appreciation or depreciation of 10% in the value of the Swiss franc against other currencies is actively monitored.

We estimate that a 10% depreciation of the Swiss franc against other currencies would have increased our fully applied LRD by CHF 68 billion (31 December 2016: CHF 64 billion) and reduced our fully applied Swiss SRB going concern leverage ratio by 12 basis points (31 December 2016: 9 basis points). Conversely, we estimate that a 10% appreciation of the Swiss franc against other currencies would have reduced our fully applied LRD by CHF 61 billion (31 December 2016: CHF 58 billion) and increased our fully applied Swiss SRB going concern leverage ratio by 12 basis points (31 December 2016: 10 basis points).

The aforementioned sensitivities do not consider foreign currency translation effects related to defined benefit plans other than those related to the currency translation of the net equity of foreign operations.

### Estimated effect on capital from litigation, regulatory and similar matters subject to provisions and contingent liabilities

We have estimated the loss in capital that we could incur as a result of the risks associated with the matters described in “Note 20 Provisions and contingent liabilities” in the “Consolidated financial statements” section of this report. We have used for this purpose the advanced measurement approach (AMA) methodology that we use when determining the capital requirements associated with operational risks, based on a 99.9% confidence level over a 12-month horizon. The methodology takes into consideration UBS and industry experience for the AMA operational risk categories to which those matters correspond, as well as the external environment affecting risks of these types, in isolation from other areas. On this standalone basis, we estimate the loss in capital that we could incur over a 12-month period as a result of our risks associated with these operational risk categories at CHF 4.8 billion as of 31 December 2017 (31 December 2016: CHF 4.8 billion). This estimate is not related to and does not take into account any provisions recognized for any of these matters and does not constitute a subjective assessment of our actual exposure in any of these matters.

- Refer to “Operational risk” in the “Risk management and control” section of this report for more information
- Refer to “Note 20 Provisions and contingent liabilities” in the “Consolidated financial statements” section of this report for more information

#### Capital and capital ratios of our significant regulated subsidiaries

UBS Group AG is a holding company and conducts substantially all of its operations through UBS AG and its subsidiaries. UBS Group AG and UBS AG have contributed a significant portion of their respective capital and provide substantial liquidity to subsidiaries. Many of these subsidiaries are subject to regulations requiring compliance with minimum capital, liquidity and similar requirements. Regulatory capital components and capital ratios of our significant regulated subsidiaries determined under the regulatory framework of each subsidiary's home jurisdiction are provided in the "Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups" section of this report. Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries. Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis and may limit the ability of the entity to engage in new activities or take capital actions based on the results of those tests.

→ **Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under "Pillar 3 disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on capital and other regulatory information of our subsidiaries and sub-groups**

#### Joint liability of UBS AG and UBS Switzerland AG

In June 2015, upon the transfer of the Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG, UBS AG and UBS Switzerland AG assumed joint liability for obligations transferred to UBS Switzerland AG and existing at UBS AG, respectively. Under certain circumstances, the Swiss Banking Act and FINMA's Banking Insolvency Ordinance authorize FINMA to modify, extinguish or convert to common equity liabilities of a bank in connection with a resolution or insolvency of such bank.

Both joint liability amounts have declined as obligations matured, terminated or were novated following the transfer date. As of 31 December 2017, the joint liability of UBS AG and UBS Switzerland AG amounted to less than CHF 1 billion and CHF 69 billion, respectively.

## Risk-weighted assets

Our risk-weighted assets (RWA) on a fully applied basis are the same as on a phase-in basis, except for differences related to defined benefit plans and deferred tax assets (DTAs) on temporary differences.

On a fully applied basis, any net defined benefit pension asset recognized in accordance with IAS 19 is fully deducted from common equity tier 1 (CET1) capital. On a phase-in basis, the deduction of net defined benefit pension assets from capital is phased in, and the portion of the net defined benefit pension asset that is not yet deducted from CET1 capital is risk weighted at 100%.

On a fully applied basis, DTAs on temporary differences below a deduction threshold are risk weighted at 250%. On a phase-in basis, the amount that is risk weighted at 250% is higher due to a higher deduction threshold.

As a result of these differences, our phase-in RWA were CHF 0.9 billion higher than our fully applied RWA as of 31 December 2017 (31 December 2016: CHF 2.7 billion higher), entirely attributable to non-counterparty-related risk RWA.

### RWA development in 2017

As of 31 December 2017, fully applied RWA increased by CHF 14.8 billion to CHF 237.5 billion, driven by a CHF 15.6 billion increase in credit and counterparty credit risk and a CHF 1.6 billion increase in operational risk, partly offset by a CHF 3.2 billion decrease in market risk.

The total RWA increase was primarily driven by a CHF 17.4 billion increase from methodology, policy changes and model updates, mainly relating to credit and counterparty credit risk. RWA also slightly increased by CHF 0.4 billion as CHF 2.2 billion higher regulatory add-ons for credit and counterparty credit risk were partly offset by CHF 1.8 billion lower regulatory add-ons for market risk.

These increases were partly offset by a CHF 2.1 billion decrease in asset size and other movements, primarily in credit and counterparty credit risk and in market risk, as well as CHF 1.0 billion lower RWA due to currency effects.

On a phase-in basis, RWA increased by CHF 13.0 billion to CHF 238.4 billion as of 31 December 2017.

→ Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on RWA movements and definitions of RWA movement key drivers

### Movement in fully applied risk-weighted assets by key driver

CHF billion	RWA as of 31.12.16	Currency effects	Methodology, policy changes and model updates	Regulatory add-ons	Asset size and other <sup>1</sup>	RWA as of 31.12.17
Credit and counterparty credit risk <sup>2</sup>	112.8	(0.7)	16.5	2.2	(2.3)	128.4
Non-counterparty-related risk	16.6	(0.2)			1.0	17.4
Market risk	15.5		(0.7)	(1.8)	(0.8)	12.3
Operational risk	77.8		1.6		0.0	79.4
<b>Total</b>	<b>222.7</b>	<b>(1.0)</b>	<b>17.4</b>	<b>0.4</b>	<b>(2.1)</b>	<b>237.5</b>

<sup>1</sup> Includes the Pillar 3 categories “Asset size,” “Credit quality of counterparties,” “Acquisitions and disposals” and “Other.” Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information. <sup>2</sup> Includes settlement risk, credit valuation adjustments, equity exposures in the banking book and securitization exposures in the banking book.

### Credit and counterparty credit risk

Credit and counterparty credit risk RWA increased by CHF 15.6 billion to CHF 128.4 billion as of 31 December 2017. This increase was primarily driven by a CHF 16.4 billion increase

resulting from model updates and a CHF 2.2 billion increase from regulatory add-ons, partly offset by a CHF 1.0 billion decrease in asset quality and a CHF 0.8 billion decrease in asset size as well as currency effects and other changes.

### Movement in fully applied credit and counterparty credit risk RWA by key driver<sup>1</sup>

CHF billion	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
<b>Total credit and counterparty credit risk RWA as of 31.12.16</b>	<b>12.5</b>	<b>9.1</b>	<b>37.7</b>	<b>1.6</b>	<b>37.0</b>	<b>1.4</b>	<b>7.3</b>	<b>6.2</b>	<b>112.8</b>
Asset size	1.4	0.6	(1.6)	0.1	(0.2)	0.4	(0.4)	(1.0)	(0.8)
Asset quality	(0.4)	0.1	1.4	0.0	(1.4)	0.0	0.0	(0.8)	(1.0)
Model updates	1.8	1.2	6.3	0.0	6.1	0.0	0.9	0.2	16.4
Methodology and policy changes	0.0	0.0	0.0	(0.2)	0.0	0.0	0.3	0.0	0.1
Regulatory add-ons	0.0	0.0	(0.2)	0.0	2.4	0.0	0.0	0.0	2.2
Acquisitions and disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign exchange movements	0.1	(0.4)	(0.1)	0.0	(0.3)	0.0	0.0	(0.1)	(0.7)
Other	0.0	(0.3)	0.6	0.0	(0.6)	0.0	(0.1)	(0.1)	(0.5)
<b>Total movement</b>	<b>2.9</b>	<b>1.3</b>	<b>6.3</b>	<b>(0.1)</b>	<b>5.9</b>	<b>0.4</b>	<b>0.7</b>	<b>(1.7)</b>	<b>15.6</b>
<b>Total credit and counterparty credit risk RWA as of 31.12.17</b>	<b>15.4</b>	<b>10.4</b>	<b>44.0</b>	<b>1.5</b>	<b>42.9</b>	<b>1.8</b>	<b>8.0</b>	<b>4.5</b>	<b>128.4</b>

<sup>1</sup> Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for the definitions of credit and counterparty credit risk RWA movement categories.

### Model updates

The increase in credit and counterparty credit risk RWA from model updates of CHF 16.4 billion was driven by an increase of CHF 6.6 billion resulting from the implementation of changes to the probability of default (PD) and loss given default (LGD) parameters for income-producing real estate exposures and Lombard exposures, of which CHF 4.3 billion was in Personal & Corporate Banking, CHF 1.7 billion in Wealth Management and CHF 0.6 billion in Wealth Management Americas. A CHF 5.4 billion increase primarily resulted from changes to LGD parameters for exposures to multinationals, sovereigns and financial institutions, of which CHF 3.6 billion was in the Investment Bank, CHF 0.9 billion in Corporate Center – Group Asset and Liability Management (Group ALM) and CHF 0.7 billion in Personal & Corporate Banking. A further increase of CHF 2.0 billion was driven by the implementation of revised credit conversion factors (CCFs) for letters of credit, trade finance-related guarantees, deferred payments and construction loans in Personal & Corporate Banking of CHF 1.2 billion, as well as for unutilized Lombard loan facilities of CHF 0.6 billion in Wealth Management Americas. An increase of CHF 2.5 billion was due to higher RWA for derivative exposures, driven by an update of the stress period used for the Basel III exposure-at-default calculation, mainly in the Investment Bank.

We anticipate that methodology changes and model updates, including adjustments to probability of default and loss given default factors, CCFs, the revised Basel III securitization framework, and scheduled increases in the FINMA-required

multiplier for Investment Bank exposures to corporates will increase credit risk RWA by around CHF 12 billion in 2018, of which around CHF 4 billion in the first quarter of 2018. The extent and timing of RWA increases may vary as methodology changes and model updates are completed and receive regulatory approval, and as regulatory multipliers are adjusted. In addition, changes in composition of the relevant portfolios and other factors will affect our RWA.

→ Refer to “Credit risk models” in the “Risk management and control” section of this report for more information on model updates

### Regulatory add-ons

The net RWA increase from regulatory add-ons of CHF 2.2 billion was mainly driven by an increase in the internal ratings-based (IRB) multiplier on Investment Bank exposures to corporates of CHF 2.9 billion, as well as an increase in the IRB multiplier on Swiss residential mortgages of CHF 1.4 billion in Personal & Corporate Banking and CHF 0.4 billion in Wealth Management. These increases were partly offset by decreases of CHF 1.8 billion in Personal & Corporate Banking, CHF 0.4 billion in Wealth Management and CHF 0.5 billion in the Investment Bank, following FINMA approval of the aforementioned updates to PD and LGD parameters.

→ Refer to the “Risk management and control” section of this report and the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on credit and counterparty credit risk developments

### Market risk

Market risk RWA decreased by CHF 3.2 billion to CHF 12.3 billion as of 31 December 2017, mainly driven by CHF 1.8 billion lower regulatory add-ons, a CHF 0.8 billion decrease due to asset size and other movements and a CHF 0.7 billion decrease due to methodology, policy changes and model updates.

The CHF 1.8 billion lower RWA from regulatory add-ons mainly reflected a lower regulatory value-at-risk (VaR) multiplier, which decreased from 3.65 to 3.0 as a result of fewer backtesting exceptions, partly offset by changes to the risks-not-in-VaR (RniV) framework.

The CHF 0.8 billion decrease in asset size and other movements was primarily driven by lower average VaR and stressed VaR levels observed during the year, primarily in the Investment Bank's Equities business.

The CHF 0.7 billion decrease in methodology, policy changes and model updates resulted from the effects of an enhancement to VaR model parameters. We will continue to implement the changes to the RniV framework over the first three quarters of

2018, with RWA expected to increase by around CHF 3 billion in total, of which around CHF 1 billion in the first quarter. Our estimates of future RWA increases do not reflect mitigating actions that we may take or any changes in the trading book composition or risk levels.

→ **Refer to the "Risk management and control" section of this report and the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under "Pillar 3 disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on market risk developments**

### Operational risk

Operational risk RWA increased by CHF 1.6 billion to CHF 79.4 billion as of 31 December 2017, driven by changes to the advanced measurement approach (AMA) model used for the calculation of operational risk capital. These changes were approved by FINMA in the first quarter of 2017.

→ **Refer to "Operational risk" in the "Risk management and control" section of this report for more information on the AMA model**

### Risk-weighted assets by business division and Corporate Center unit

CHF billion	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Total RWA
	<b>31.12.17</b>								
<b>Credit and counterparty credit risk<sup>1</sup></b>	<b>15.4</b>	<b>10.4</b>	<b>44.0</b>	<b>1.5</b>	<b>42.9</b>	<b>1.8</b>	<b>8.0</b>	<b>4.5</b>	<b>128.4</b>
<i>Advanced IRB approach<sup>2</sup></i>	<i>11.0</i>	<i>5.2</i>	<i>41.6</i>	<i>0.8</i>	<i>40.2</i>	<i>0.4</i>	<i>6.3</i>	<i>3.4</i>	<i>108.9</i>
<i>Standardized approach<sup>3</sup></i>	<i>4.4</i>	<i>5.2</i>	<i>2.4</i>	<i>0.6</i>	<i>2.8</i>	<i>1.4</i>	<i>1.8</i>	<i>1.1</i>	<i>19.6</i>
<b>Non-counterparty-related risk<sup>4</sup></b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>18.0</b>	<b>0.0</b>	<b>0.0</b>	<b>18.3</b>
<b>Market risk</b>	<b>0.0</b>	<b>1.6</b>	<b>0.0</b>	<b>0.0</b>	<b>11.7</b>	<b>(3.1)<sup>5</sup></b>	<b>0.7</b>	<b>1.3</b>	<b>12.3</b>
<b>Operational risk</b>	<b>13.5</b>	<b>13.5</b>	<b>4.0</b>	<b>2.4</b>	<b>19.8</b>	<b>13.3</b>	<b>2.5</b>	<b>10.3</b>	<b>79.4</b>
<b>Total RWA, phase-in</b>	<b>29.0</b>	<b>25.5</b>	<b>48.0</b>	<b>3.9</b>	<b>74.5</b>	<b>30.1</b>	<b>11.2</b>	<b>16.1</b>	<b>238.4</b>
Phase-out items <sup>6</sup>	0.0	0.0	0.0	0.0	0.0	(0.9)	0.0	0.0	(0.9)
<b>Total RWA, fully applied<sup>7</sup></b>	<b>29.0</b>	<b>25.5</b>	<b>48.0</b>	<b>3.9</b>	<b>74.5</b>	<b>29.2</b>	<b>11.2</b>	<b>16.1</b>	<b>237.5</b>
RWA held by CC – Group ALM on behalf of business divisions and other CC units <sup>8</sup>	1.2	1.0	1.0	0.1	0.5	0.0	(3.9)	0.0	0.0
<b>RWA after allocation from CC – Group ALM to business divisions and other CC units</b>	<b>30.2</b>	<b>26.5</b>	<b>49.1</b>	<b>4.0</b>	<b>75.0</b>	<b>29.2</b>	<b>7.3</b>	<b>16.1</b>	<b>237.5</b>
	<b>31.12.16</b>								
<b>Credit and counterparty credit risk<sup>1</sup></b>	<b>12.5</b>	<b>9.1</b>	<b>37.7</b>	<b>1.6</b>	<b>37.0</b>	<b>1.4</b>	<b>7.3</b>	<b>6.2</b>	<b>112.8</b>
<i>Advanced IRB approach<sup>2</sup></i>	<i>9.0</i>	<i>3.7</i>	<i>36.1</i>	<i>0.9</i>	<i>33.7</i>	<i>0.2</i>	<i>4.8</i>	<i>5.0</i>	<i>93.4</i>
<i>Standardized approach<sup>3</sup></i>	<i>3.5</i>	<i>5.4</i>	<i>1.6</i>	<i>0.6</i>	<i>3.3</i>	<i>1.2</i>	<i>2.6</i>	<i>1.2</i>	<i>19.4</i>
<b>Non-counterparty-related risk<sup>4</sup></b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>19.1</b>	<b>0.0</b>	<b>0.0</b>	<b>19.3</b>
<b>Market risk</b>	<b>0.0</b>	<b>1.4</b>	<b>0.0</b>	<b>0.0</b>	<b>14.0</b>	<b>(3.2)<sup>5</sup></b>	<b>0.7</b>	<b>2.6</b>	<b>15.5</b>
<b>Operational risk</b>	<b>13.2</b>	<b>13.2</b>	<b>3.9</b>	<b>2.3</b>	<b>19.5</b>	<b>13.1</b>	<b>2.5</b>	<b>10.1</b>	<b>77.8</b>
<b>Total RWA, phase-in</b>	<b>25.8</b>	<b>23.8</b>	<b>41.6</b>	<b>3.9</b>	<b>70.4</b>	<b>30.3</b>	<b>10.6</b>	<b>18.9</b>	<b>225.4</b>
Phase-out items <sup>6</sup>	0.0	0.0	0.0	0.0	0.0	(2.7)	0.0	0.0	(2.7)
<b>Total RWA, fully applied</b>	<b>25.8</b>	<b>23.8</b>	<b>41.6</b>	<b>3.9</b>	<b>70.4</b>	<b>27.6</b>	<b>10.6</b>	<b>18.9</b>	<b>222.7</b>
	<b>31.12.17 vs 31.12.16</b>								
<b>Credit and counterparty credit risk<sup>1</sup></b>	<b>2.9</b>	<b>1.3</b>	<b>6.3</b>	<b>(0.1)</b>	<b>5.9</b>	<b>0.4</b>	<b>0.7</b>	<b>(1.7)</b>	<b>15.6</b>
<i>Advanced IRB approach<sup>2</sup></i>	<i>2.0</i>	<i>1.5</i>	<i>5.5</i>	<i>(0.1)</i>	<i>6.5</i>	<i>0.2</i>	<i>1.5</i>	<i>(1.6)</i>	<i>15.5</i>
<i>Standardized approach<sup>3</sup></i>	<i>0.9</i>	<i>(0.2)</i>	<i>0.8</i>	<i>0.0</i>	<i>(0.5)</i>	<i>0.2</i>	<i>(0.8)</i>	<i>(0.1)</i>	<i>0.2</i>
<b>Non-counterparty-related risk<sup>4</sup></b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>(1.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>(1.0)</b>
<b>Market risk</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>(2.3)</b>	<b>0.1</b>	<b>0.0</b>	<b>(1.3)</b>	<b>(3.2)</b>
<b>Operational risk</b>	<b>0.3</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>1.6</b>
<b>Total RWA, phase-in</b>	<b>3.2</b>	<b>1.7</b>	<b>6.4</b>	<b>0.0</b>	<b>4.1</b>	<b>(0.2)</b>	<b>0.6</b>	<b>(2.8)</b>	<b>13.0</b>
Phase-out items <sup>6</sup>	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	1.8
<b>Total RWA, fully applied</b>	<b>3.2</b>	<b>1.7</b>	<b>6.4</b>	<b>0.0</b>	<b>4.1</b>	<b>1.6</b>	<b>0.6</b>	<b>(2.8)</b>	<b>14.8</b>

<sup>1</sup> Includes settlement risk, credit valuation adjustments, equity exposures in the banking book and securitization exposures in the banking book. <sup>2</sup> Includes equity exposures in the banking book according to the simple risk weight method. <sup>3</sup> Includes settlement risk and business transfers. <sup>4</sup> Non-counterparty-related risk includes deferred tax assets recognized for temporary differences (31 December 2017: CHF 9.3 billion; 31 December 2016: CHF 10.9 billion), property, equipment and software (31 December 2017: CHF 8.8 billion; 31 December 2016: CHF 8.3 billion) and other items (31 December 2017: CHF 0.2 billion; 31 December 2016: CHF 0.2 billion). <sup>5</sup> Corporate Center – Services market risk RWA were negative, as they included the effect of portfolio diversification across businesses. <sup>6</sup> Phase-out items are entirely related to non-counterparty-related risk RWA. <sup>7</sup> Represents RWA held by the respective business division or Corporate Center unit. <sup>8</sup> Represents RWA held by Corporate Center – Group ALM that are directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in this section for more information.

## Leverage ratio denominator

The fully applied leverage ratio denominator (LRD) increased by CHF 16 billion to CHF 886 billion as of 31 December 2017, primarily driven by asset size and other increases of CHF 20 billion, partly offset by CHF 3 billion incremental netting and collateral mitigation and currency effects of CHF 1 billion.

### Movement in fully applied leverage ratio denominator by key driver

<i>CHF billion</i>	LRD as of 31.12.16	Currency effects	Incremental netting and collateral mitigation	Asset size and other	LRD as of 31.12.17
On-balance sheet exposures (excluding derivative exposures and SFTs) <sup>1</sup>	638.1	(2.4)		11.3	646.9
Derivative exposures	107.6	1.3	(2.2)	(8.6)	98.1
Securities financing transactions	104.7	0.0	(0.8)	20.2	124.2
Off-balance sheet items	37.7	(0.5)		(6.1)	31.1
Deduction items	(17.7)	0.5		3.1	(14.1)
<b>Total</b>	<b>870.5</b>	<b>(1.1)</b>	<b>(3.0)</b>	<b>19.8</b>	<b>886.1</b>

<sup>1</sup> Excludes positive replacement values, cash collateral receivables on derivative instruments, cash collateral on securities borrowed, reverse repurchase agreements, margin loans and prime brokerage receivables related to securities financing transactions, which are presented separately under Derivative exposures and Securities financing transactions in this table.

Currency effects mainly reflect the weakening of the US dollar against the Swiss franc. The LRD movements described below exclude currency effects.

Securities financing transactions (SFTs) increased by CHF 20 billion due to asset size and other movements, primarily resulting from the rebalancing of our high-quality liquid assets (HQLA) portfolio in Corporate Center – Group Asset and Liability Management (Group ALM) of CHF 16 billion, as well as CHF 3 billion client-driven increases in the Investment Bank, mainly related to higher prime brokerage receivables.

On-balance sheet exposures (excluding derivative exposures and SFTs) increased by CHF 11 billion. This was mainly driven by a CHF 33 billion increase in trading portfolio assets, primarily in our Investment Bank's Equities business, mainly reflecting a client-driven increase and higher equity markets. An increase in lending by CHF 14 billion primarily reflects higher Lombard lending balances in Wealth Management. These increases were partly offset by a CHF 20 billion decrease in cash and balances with central banks primarily in Corporate Center – Group ALM, mainly due to higher funding consumption by the business divisions, partly offset by net issuances of short-term and long-term debt. Financial assets designated at fair value, available for sale and held to maturity decreased by CHF 12 billion, mainly resulting from the aforementioned rebalancing within our HQLA portfolio held by Corporate Center – Group ALM, partly offset by a CHF 7 billion client-driven increase in Corporate Client

Solutions within the Investment Bank. A CHF 2 billion decrease in Corporate Center – Services mainly resulted from a net write-down in the Group's deferred tax assets (DTAs) following a reduction in the US federal corporate tax rate after the enactment of the Tax Cuts and Jobs Act in the US during the fourth quarter of 2017, which was fully offset by lower deduction items for DTAs.

Derivative exposures decreased by CHF 9 billion due to asset size and other movements, primarily resulting from a CHF 6 billion reduction in our Corporate Center – Non-core and Legacy Portfolio, primarily reflecting trade terminations and maturities, mainly related to interest rate and foreign exchange contracts, and a CHF 3 billion net decrease in the Investment Bank, mainly related to foreign exchange contracts in our Foreign Exchange, Rates and Credit business, primarily reflecting net maturities, partly offset by fair value changes resulting from currency market movements. A decrease of CHF 2 billion related to incremental netting and collateral mitigation benefits mainly reflected improved netting of eligible cash variation margin.

Off-balance sheet items decreased by CHF 6 billion, primarily due to terminations of committed credit facilities in the Investment Bank's Corporate Client Solutions business.

→ Refer to "Balance sheet, liquidity and funding management" in the "Treasury management" section of this report for more information on balance sheet movements

### Leverage ratio denominator by business division and Corporate Center unit

<i>CHF billion</i>	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Total
	<b>31.12.17</b>								
Total IFRS assets	123.0	67.1	135.6	14.3	262.9	20.9	245.7	46.2	915.6
Difference in scope of consolidation <sup>1</sup>	0.0	(0.2)	0.0	(11.6)	(0.3)	(0.1)	0.1	(0.1)	(12.1)
Less: derivative exposures and SFTs <sup>2</sup>	(2.6)	(2.1)	(1.2)	0.0	(130.6)	0.0	(78.1)	(41.9)	(256.6)
<b>On-balance sheet exposures</b>	<b>120.4</b>	<b>64.8</b>	<b>134.4</b>	<b>2.7</b>	<b>132.1</b>	<b>20.7</b>	<b>167.8</b>	<b>4.2</b>	<b>646.9</b>
Derivative exposures	2.9	5.2	1.8	0.0	73.0	0.0	5.8	9.4	98.1
Securities financing transactions	1.2	1.0	0.0	0.0	44.6	0.0	76.1	1.3	124.2
Off-balance sheet items	3.6	0.8	11.9	0.0	14.5	0.1	0.1	0.0	31.1
Items deducted from Swiss SRB tier 1 capital						(12.6)			(12.6)
<b>LRD, phase-in</b>	<b>128.0</b>	<b>71.8</b>	<b>148.0</b>	<b>2.7</b>	<b>264.1</b>	<b>8.2</b>	<b>249.9</b>	<b>14.9</b>	<b>887.6</b>
Additional items deducted from Swiss SRB tier 1 capital						(1.5)			(1.5)
<b>LRD, fully applied<sup>3</sup></b>	<b>128.0</b>	<b>71.8</b>	<b>148.0</b>	<b>2.7</b>	<b>264.1</b>	<b>6.7</b>	<b>249.9</b>	<b>14.9</b>	<b>886.1</b>
LRD held by CC – Group ALM on behalf of business divisions and other CC units <sup>4</sup>	45.9	16.2	38.9	2.1	19.4	0.1	(124.4)	1.7	0.0
<b>LRD after allocation from CC – Group ALM to business divisions and other CC units</b>	<b>173.9</b>	<b>88.0</b>	<b>186.9</b>	<b>4.8</b>	<b>283.6</b>	<b>6.8</b>	<b>125.5</b>	<b>16.6</b>	<b>886.1</b>
	<b>31.12.16</b>								
Total IFRS assets	115.5	65.9	139.9	12.0	242.3	23.7	267.2	68.5	935.0
Difference in scope of consolidation <sup>1</sup>	(5.1)	(0.2)	0.0	(9.3)	(0.7)	(0.2)	0.2	0.0	(15.5)
Less: derivative exposures and SFTs <sup>2</sup>	(2.0)	(2.0)	(2.2)	0.0	(151.4)	0.0	(60.6)	(63.3)	(281.4)
<b>On-balance sheet exposures</b>	<b>108.4</b>	<b>63.7</b>	<b>137.7</b>	<b>2.7</b>	<b>90.2</b>	<b>23.4</b>	<b>206.7</b>	<b>5.2</b>	<b>638.1</b>
Derivative exposures	3.5	2.5	2.7	0.0	77.5	0.0	6.3	15.2	107.6
Securities financing transactions	0.0	1.0	0.0	0.0	42.9	0.0	59.1	1.8	104.7
Off-balance sheet items	3.6	0.9	11.9	0.0	20.6	0.1	0.3	0.3	37.7
Items deducted from Swiss SRB tier 1 capital						(13.2)			(13.2)
<b>LRD, phase-in</b>	<b>115.5</b>	<b>68.1</b>	<b>152.2</b>	<b>2.7</b>	<b>231.2</b>	<b>10.3</b>	<b>272.4</b>	<b>22.4</b>	<b>874.9</b>
Additional items deducted from Swiss SRB tier 1 capital						(4.5)			(4.5)
<b>LRD, fully applied</b>	<b>115.5</b>	<b>68.1</b>	<b>152.2</b>	<b>2.7</b>	<b>231.2</b>	<b>5.8</b>	<b>272.4</b>	<b>22.4</b>	<b>870.5</b>
	<b>31.12.17 vs 31.12.16</b>								
Total IFRS assets	7.5	1.2	(4.3)	2.3	20.6	(2.8)	(21.5)	(22.3)	(19.4)
Difference in scope of consolidation <sup>1</sup>	5.1	0.0	0.0	(2.3)	0.4	0.1	(0.1)	(0.1)	3.4
Less: derivative exposures and SFTs <sup>2</sup>	(0.6)	(0.1)	1.0	0.0	20.8	0.0	(17.5)	21.4	24.8
<b>On-balance sheet exposures</b>	<b>12.0</b>	<b>1.1</b>	<b>(3.3)</b>	<b>0.0</b>	<b>41.9</b>	<b>(2.7)</b>	<b>(38.9)</b>	<b>(1.0)</b>	<b>8.8</b>
Derivative exposures	(0.6)	2.7	(0.9)	0.0	(4.5)	0.0	(0.5)	(5.8)	(9.5)
Securities financing transactions	1.2	0.0	0.0	0.0	1.7	0.0	17.0	(0.5)	19.5
Off-balance sheet items	0.0	(0.1)	0.0	0.0	(6.1)	0.0	(0.2)	(0.3)	(6.6)
Items deducted from Swiss SRB tier 1 capital						0.6			0.6
<b>LRD, phase-in</b>	<b>12.5</b>	<b>3.7</b>	<b>(4.2)</b>	<b>0.0</b>	<b>32.9</b>	<b>(2.1)</b>	<b>(22.5)</b>	<b>(7.5)</b>	<b>12.7</b>
Additional items deducted from Swiss SRB tier 1 capital						3.0			3.0
<b>LRD, fully applied</b>	<b>12.5</b>	<b>3.7</b>	<b>(4.2)</b>	<b>0.0</b>	<b>32.9</b>	<b>0.9</b>	<b>(22.5)</b>	<b>(7.5)</b>	<b>15.6</b>

<sup>1</sup> Represents the difference between the IFRS and the regulatory scope of consolidation, which is the applicable scope for the LRD calculation. <sup>2</sup> Consists of positive replacement values, cash collateral receivables on derivative instruments, cash collateral on securities borrowed, reverse repurchase agreements, margin loans and prime brokerage receivables related to securities financing transactions in accordance with the regulatory scope of consolidation, which are presented separately under Derivative exposures and Securities financing transactions. <sup>3</sup> Represents LRD held by the respective business division or Corporate Center unit. <sup>4</sup> Represents LRD held by Corporate Center – Group ALM that is directly associated with activity managed centrally on behalf of the business divisions and other Corporate Center units. For the purpose of attributing equity under the revised framework effective as of 1 January 2017, these resources are allocated to the business divisions and other Corporate Center units, primarily based on the level of high-quality liquid assets needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Refer to "Equity attribution and return on attributed equity" in this section for more information.



# UBS AG consolidated total loss-absorbing capacity and leverage ratio information

## Going and gone concern requirements and information

UBS is considered a systemically relevant bank (SRB) under Swiss banking law and, on a consolidated basis, both UBS Group AG and UBS AG are required to comply with regulations based on the Basel III framework as applicable for Swiss SRBs.

The Swiss SRB framework and requirements applicable to UBS AG consolidated are consistent with those applicable to UBS Group AG consolidated and are described in the "Capital management" section of this report.

→ Refer to "Regulatory framework" in this section for more information on total loss-absorbing capacity, leverage ratio requirements and gone concern rebate

UBS AG is subject to going concern requirements on a standalone basis. Capital and other regulatory information for UBS AG standalone is provided under "Holding company and significant regulated subsidiaries and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) and in the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under "Pillar 3 disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors).

The table below provides the risk-weighted assets (RWA)- and leverage ratio denominator (LRD)-based requirements and information as of 31 December 2017 for UBS AG consolidated.

## Swiss SRB going and gone concern requirements and information<sup>1</sup>

As of 31.12.17 CHF million, except where indicated	Swiss SRB, including transitional arrangements (phase-in)				Swiss SRB as of 1.1.20 (fully applied)			
	RWA		LRD		RWA		LRD	
	in %		in %		in %		in %	
<b>Required loss-absorbing capacity</b>								
<b>Common equity tier 1 capital</b>	9.22	21,890	2.60	23,106	10.22	24,178	3.50	31,052
of which: minimum capital	5.80	13,772	2.10	18,662	4.50	10,647	1.50	13,308
of which: buffer capital	3.20	7,599	0.50	4,443	5.50	13,013	2.00	17,744
of which: countercyclical buffer <sup>2</sup>	0.22	519			0.22	517		
<b>Maximum additional tier 1 capital</b>	3.00	7,124	0.90	7,998	4.30	10,174	1.50	13,308
of which: high-trigger loss-absorbing additional tier 1 minimum capital	2.20	5,224	0.90	7,998	3.50	8,281	1.50	13,308
of which: high-trigger loss-absorbing additional tier 1 buffer capital	0.80	1,900			0.80	1,893		
<b>Total going concern capital</b>	12.22	29,014	3.50	31,104	14.52 <sup>3</sup>	34,352	5.00 <sup>3</sup>	44,359
Base gone concern loss-absorbing capacity, including applicable add-ons and rebate	5.33 <sup>4</sup>	12,661	1.72 <sup>4</sup>	15,285	12.30 <sup>5</sup>	29,098	4.30 <sup>5</sup>	38,149
<b>Total gone concern loss-absorbing capacity</b>	5.33	12,661	1.72	15,285	12.30	29,098	4.30	38,149
<b>Total loss-absorbing capacity</b>	17.55	41,675	5.22	46,389	26.82	63,449	9.30	82,509
<b>Eligible loss-absorbing capacity</b>								
<b>Common equity tier 1 capital</b>	15.18	36,042	4.06	36,042	14.05	33,240	3.75	33,240
<b>High-trigger loss-absorbing additional tier 1 capital<sup>6,7</sup></b>	4.31	10,244	1.15	10,244	1.55	3,666	0.41	3,666
of which: high-trigger loss-absorbing additional tier 1 capital	1.00	2,371	0.27	2,371	1.55	3,666	0.41	3,666
of which: low-trigger loss-absorbing tier 2 capital	3.32	7,874	0.89	7,874				
<b>Total going concern capital</b>	19.49	46,286	5.21	46,286	15.60	36,906	4.16	36,906
<b>Gone concern loss-absorbing capacity</b>	12.42	29,483	3.32	29,483	15.79	37,357	4.21	37,357
of which: TLAC-eligible debt	11.47	27,233	3.06	27,233	11.51	27,233	3.07	27,233
<b>Total gone concern loss-absorbing capacity</b>	12.42	29,483	3.32	29,483	15.79	37,357	4.21	37,357
<b>Total loss-absorbing capacity</b>	31.91	75,769	8.53	75,769	31.39	74,263	8.37	74,263
<b>Risk-weighted assets / leverage ratio denominator</b>								
Risk-weighted assets	237,456				236,606			
Leverage ratio denominator			888,687				887,189	

## Risk-weighted assets / leverage ratio denominator

Risk-weighted assets	237,456				236,606			
Leverage ratio denominator			888,687				887,189	

<sup>1</sup> This table includes a rebate equal to 35% of the maximum rebate on the gone concern requirements, which was granted by FINMA. This resulted in a reduction of 2.0 percentage points for the RWA-based requirement and 0.7 percentage points for the LRD-based requirement and will be phased in until 1 January 2020. This table does not include a rebate for the usage of low-trigger loss-absorbing additional tier 1 or tier 2 capital instruments to meet the gone concern requirements. <sup>2</sup> Going concern capital ratio requirements include countercyclical buffer requirements of 0.22% for the phase-in and fully applied requirement. <sup>3</sup> Includes applicable add-ons of 1.44% for risk-weighted assets (RWA) and 0.5% for leverage ratio denominator (LRD). <sup>4</sup> Includes applicable add-ons of 0.36% for RWA and 0.13% for LRD and a rebate of 0.87% for RWA and 0.28% for LRD. <sup>5</sup> Includes applicable add-ons of 1.44% for RWA and 0.5% for LRD and a rebate of 2% for RWA and 0.7% for LRD. <sup>6</sup> High-trigger loss-absorbing additional tier 1 capital was partly offset by required deductions for goodwill on a phase-in basis. <sup>7</sup> Includes outstanding low-trigger loss-absorbing tier 2 capital instruments, which are available under the transitional rules of the Swiss SRB framework to meet the going concern requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019, and to meet gone concern requirements thereafter. Outstanding low-trigger loss-absorbing tier 2 capital instruments are subject to amortization starting five years prior to their maturity, with the amortized portion qualifying as gone concern loss-absorbing capacity. Instruments available to meet gone concern requirements are eligible until one year before maturity, with a haircut of 50% applied in the last year of eligibility.

### Swiss SRB going and gone concern information

	Swiss SRB, including transitional arrangements (phase-in)		Swiss SRB as of 1.1.20 (fully applied)	
<i>CHF million, except where indicated</i>	31.12.17	31.12.16	31.12.17	31.12.16
<b>Going concern capital</b>				
<b>Common equity tier 1 capital</b>	<b>36,042</b>	39,474	<b>33,240</b>	32,447
High-trigger loss-absorbing additional tier 1 capital	2,371 <sup>1</sup>	1,208 <sup>1</sup>	3,666	3,848
<b>Total loss-absorbing additional tier 1 capital</b>	<b>2,371</b>	1,208	<b>3,666</b>	3,848
<b>Total tier 1 capital</b>	<b>38,412</b>	40,682	<b>36,906</b>	36,294
Low-trigger loss-absorbing tier 2 capital	7,874 <sup>2</sup>	10,402		
<b>Total tier 2 capital</b>	<b>7,874</b>	10,402		
<b>Total going concern capital</b>	<b>46,286</b>	51,084	<b>36,906</b>	36,294
<b>Gone concern loss-absorbing capacity<sup>3</sup></b>				
Low-trigger loss-absorbing additional tier 1 capital <sup>4</sup>	1,183	1,071	1,183	1,071
Non-Basel III-compliant tier 1 capital <sup>5</sup>	0	642	0	642
<b>Total tier 1 capital</b>	<b>1,183</b>	1,713	<b>1,183</b>	1,713
Low-trigger loss-absorbing tier 2 capital	378 <sup>2</sup>		8,252	10,402
Non-Basel III-compliant tier 2 capital <sup>5</sup>	689	698	689	698
<b>Total tier 2 capital</b>	<b>1,067</b>	698	<b>8,941</b>	11,100
<b>TLAC-eligible debt</b>	<b>27,233</b>	16,960	<b>27,233</b>	16,960
<b>Total gone concern loss-absorbing capacity</b>	<b>29,483</b>	19,372	<b>37,357</b>	29,774
<b>Total loss-absorbing capacity</b>				
<b>Total loss-absorbing capacity</b>	<b>75,769</b>	70,456	<b>74,263</b>	66,068
<b>Risk-weighted assets / leverage ratio denominator</b>				
Risk-weighted assets	237,456	225,743	236,606	223,232
Leverage ratio denominator	888,687	875,325	887,189	870,942
<b>Capital and loss-absorbing capacity ratios (%)</b>				
Going concern capital ratio	19.5	22.6	15.6	16.3
<i>of which: common equity tier 1 capital ratio</i>	<i>15.2</i>	<i>17.5</i>	<i>14.0</i>	<i>14.5</i>
Gone concern loss-absorbing capacity ratio	12.4	8.6	15.8	13.3
<b>Total loss-absorbing capacity ratio</b>	<b>31.9</b>	31.2	<b>31.4</b>	29.6
<b>Leverage ratios (%)</b>				
Going concern leverage ratio	5.2	5.8	4.2	4.2
<i>of which: common equity tier 1 leverage ratio</i>	<i>4.1</i>	<i>4.5</i>	<i>3.7</i>	<i>3.7</i>
Gone concern leverage ratio	3.3	2.2	4.2	3.4
<b>Total loss-absorbing capacity leverage ratio</b>	<b>8.5</b>	8.0	<b>8.4</b>	7.6

<sup>1</sup> High-trigger loss-absorbing additional tier 1 capital (31 December 2017: CHF 3,666 million; 31 December 2016: CHF 3,848 million) was partly offset by required deductions for goodwill (31 December 2017: CHF 1,296 million; 31 December 2016: CHF 2,639 million). <sup>2</sup> Outstanding low-trigger loss-absorbing tier 2 capital instruments are subject to amortization starting five years prior to their maturity, with the amortized portion qualifying as gone concern loss-absorbing capacity. <sup>3</sup> Instruments available to meet gone concern requirements are eligible until one year before maturity, with a haircut of 50% applied in the last year of eligibility. <sup>4</sup> The relevant capital instrument was issued after the new Swiss SRB framework had been implemented and therefore qualifies as gone concern loss-absorbing capacity. <sup>5</sup> Non-Basel III-compliant tier 1 and tier 2 capital instruments qualify as gone concern instruments.

## UBS Group AG vs UBS AG consolidated loss-absorbing capacity and leverage ratio information

As of 31 December 2017, fully applied going concern capital of UBS AG consolidated was CHF 5.0 billion lower than for UBS Group AG consolidated, reflecting CHF 5.6 billion lower going concern loss-absorbing additional tier 1 (AT1) capital, partly offset by CHF 0.6 billion higher common equity tier 1 (CET1) capital. The fully applied gone concern loss-absorbing capacity was CHF 1.0 billion higher, due to CHF 1.2 billion higher low-trigger loss-absorbing AT1 capital, partly offset by CHF 0.2 billion lower high-trigger loss-absorbing tier 2 capital.

The difference of CHF 0.6 billion in fully applied CET1 capital was primarily due to compensation-related capital components, related regulatory capital accruals, liabilities and capital instruments that are reflected at the UBS Group AG level.

The difference of CHF 5.6 billion in going concern loss-absorbing AT1 capital on a fully applied basis relates to loss-absorbing AT1 capital instruments issued at the UBS Group AG level, including CHF 1.7 billion of high-trigger loss-absorbing Deferred Contingent Capital Plan (DCCP) awards granted to eligible employees for the performance years 2014 to 2017.

The difference of CHF 1.2 billion in gone concern low-trigger AT1 capital relates to a capital instrument that was issued by UBS AG after the new Swiss SRB framework had been

implemented and is therefore not recognized within going concern capital but qualifies as gone concern loss-absorbing capacity. Issuances of low-trigger AT1 capital from UBS Group AG were all made prior to implementation of the new Swiss SRB framework and therefore qualify as going concern capital.

The difference of CHF 0.2 billion in fully applied gone concern tier 2 capital relates to high-trigger loss-absorbing capital instruments, in the form of 2013 DCCP awards, held at UBS Group AG level.

Differences in capital between UBS Group AG consolidated and UBS AG consolidated related to employee compensation plans will reverse to the extent underlying services are performed by employees of, and are consequently charged to, UBS AG and its subsidiaries. Such reversal generally occurs over the service period of the employee compensation plans.

The leverage ratio framework for UBS AG consolidated is consistent with that of UBS Group AG consolidated. As of 31 December 2017, the going concern leverage ratio of UBS AG consolidated was 0.5 percentage points lower than that of UBS Group AG consolidated on a fully applied basis, mainly as the going concern capital of UBS AG consolidated was CHF 5.0 billion lower.

### Audited I

#### Reconciliation of IFRS equity to Swiss SRB common equity tier 1 capital (UBS Group AG vs UBS AG consolidated)

As of 31.12.17	Swiss SRB, including transitional arrangements (phase-in)			Swiss SRB as of 1.1.20 (fully applied)		
	UBS Group AG (consolidated)	UBS AG (consolidated)	Differences	UBS Group AG (consolidated)	UBS AG (consolidated)	Differences
<i>CHF million</i>						
<b>Total IFRS equity</b>	51,271	50,775	496	51,271	50,775	496
Equity attributable to preferred noteholders and non-controlling interests	(57)	(57)	0	(57)	(57)	0
Deferred tax assets recognized for tax loss carry-forwards	(4,637)	(4,637)	0	(5,797)	(5,797)	0
Deferred tax assets on temporary differences, excess over threshold	(489)	(403)	(86)	(857)	(749)	(108)
Goodwill, net of tax	(5,183)	(5,183)	0	(6,479)	(6,479)	0
Intangible assets, net of tax	(214)	(214)	0	(214)	(214)	0
Compensation-related components (not recognized in net profit)	(1,620)		(1,620)	(1,620)		(1,620)
Expected losses on advanced internal ratings-based portfolio less general provisions	(634)	(634)	0	(634)	(634)	0
Unrealized (gains) / losses from cash flow hedges, net of tax	(351)	(351)	0	(351)	(351)	0
Unrealized own credit related to financial liabilities designated at fair value, net of tax, and replacement values	133	133	0	133	133	0
Unrealized gains related to financial assets available for sale, net of tax	(193)	(193)	0	(193)	(193)	0
Prudential valuation adjustments	(59)	(59)	0	(59)	(59)	0
Consolidation scope	(44)	(44)	0	(44)	(44)	0
Accruals for proposed dividends to shareholders	(2,438)	(3,065)	627	(2,438)	(3,065)	627
Other	10	(26)	36	10	(26)	36
<b>Total common equity tier 1 capital</b>	35,494	36,042	(548)	32,671	33,240	(569)

### Swiss SRB going and gone concern information (UBS Group AG vs UBS AG consolidated)

As of 31.12.17	Swiss SRB, including transitional arrangements (phase-in)			Swiss SRB as of 1.1.20 (fully applied)		
	UBS Group AG (consolidated)	UBS AG (consolidated)	Differences	UBS Group AG (consolidated)	UBS AG (consolidated)	Differences
<i>CHF million, except where indicated</i>						
<b>Going concern capital</b>						
<b>Common equity tier 1 capital</b>	35,494	36,042	(548)	32,671	33,240	(569)
High-trigger loss-absorbing additional tier 1 capital	6,857	2,371 <sup>1</sup>	4,486	6,857	3,666	3,191
Low-trigger loss-absorbing additional tier 1 capital	1,087 <sup>2</sup>		1,087	2,383		2,383
<b>Total loss-absorbing additional tier 1 capital</b>	7,944	2,371	5,573	9,240	3,666	5,574
<b>Total tier 1 capital</b>	43,438	38,412	5,026	41,911	36,906	5,005
High-trigger loss-absorbing tier 2 capital	435		435			
Low-trigger loss-absorbing tier 2 capital	7,874 <sup>3</sup>	7,874 <sup>3</sup>	0			
<b>Total tier 2 capital</b>	8,309	7,874	435			
<b>Total going concern capital</b>	51,748	46,286	5,462	41,911	36,906	5,005
<b>Gone concern loss-absorbing capacity<sup>4</sup></b>						
Low-trigger loss-absorbing additional tier 1 capital		1,183 <sup>5</sup>	(1,183)		1,183 <sup>5</sup>	(1,183)
<b>Total tier 1 capital</b>		1,183	(1,183)		1,183	(1,183)
High-trigger loss-absorbing tier 2 capital				218		218
Low-trigger loss-absorbing tier 2 capital	378 <sup>3</sup>	378 <sup>3</sup>	0	8,252	8,252	0
Non-Basel III-compliant tier 2 capital	689	689	0	689	689	0
<b>Total tier 2 capital</b>	1,067	1,067	0	9,159	8,941	218
<b>TLAC-eligible debt</b>	27,233	27,233	0	27,233	27,233	0
<b>Total gone concern loss-absorbing capacity</b>	28,300	29,483	(1,183)	36,392	37,357	(965)
<b>Total loss-absorbing capacity</b>						
<b>Total loss-absorbing capacity</b>	80,048	75,769	4,279	78,303	74,263	4,040
<b>Risk-weighted assets / leverage ratio denominator</b>						
Risk-weighted assets	238,394	237,456	938	237,494	236,606	888
Leverage ratio denominator	887,635	888,687	(1,052)	886,116	887,189	(1,073)
<b>Capital and loss-absorbing capacity ratios (%)</b>						
Going concern capital ratio	21.7	19.5	2.2	17.6	15.6	2.0
<i>of which: common equity tier 1 capital ratio</i>	<i>14.9</i>	<i>15.2</i>	<i>(0.3)</i>	<i>13.8</i>	<i>14.0</i>	<i>(0.2)</i>
Gone concern loss-absorbing capacity ratio	11.9	12.4	(0.5)	15.3	15.8	(0.5)
<b>Total loss-absorbing capacity ratio</b>	<b>33.6</b>	<b>31.9</b>	<b>1.7</b>	<b>33.0</b>	<b>31.4</b>	<b>1.6</b>
<b>Leverage ratios (%)</b>						
Going concern leverage ratio	5.8	5.2	0.6	4.7	4.2	0.5
<i>of which: common equity tier 1 leverage ratio</i>	<i>4.0</i>	<i>4.1</i>	<i>(0.1)</i>	<i>3.7</i>	<i>3.7</i>	<i>0.0</i>
Gone concern leverage ratio	3.2	3.3	(0.1)	4.1	4.2	(0.1)
<b>Total loss-absorbing capacity leverage ratio</b>	<b>9.0</b>	<b>8.5</b>	<b>0.5</b>	<b>8.8</b>	<b>8.4</b>	<b>0.4</b>

<sup>1</sup> High-trigger loss-absorbing AT1 capital of CHF 3,666 million was partly offset by required deductions for goodwill of CHF 1,296 million. <sup>2</sup> Low-trigger loss-absorbing AT1 capital of CHF 2,383 million was partly offset by required deductions for goodwill of CHF 1,296 million. <sup>3</sup> Outstanding low-trigger loss-absorbing tier 2 capital instruments are subject to amortization starting five years prior to their maturity, with the amortized portion qualifying as gone concern loss-absorbing capacity. <sup>4</sup> Instruments available to meet gone concern requirements are eligible until one year before maturity, with a haircut of 50% applied in the last year of eligibility. <sup>5</sup> The relevant capital instrument was issued after the new Swiss SRB framework had been implemented and therefore qualifies as gone concern loss-absorbing capacity.

## Equity attribution and return on attributed equity

Average attributed equity to business divisions and Corporate Center increased by CHF 4.6 billion to CHF 52.8 billion in 2017, primarily driven by the changes to the equity attribution framework described below.

### Change in equity attribution framework in 2017

In the first quarter of 2017, we implemented an updated equity attribution framework, which reflects the revision of the too big to fail provisions applicable to Swiss systemically relevant banks.

Effective 1 January 2017, the weighting used for the attribution of tangible equity was changed from an equal driver weighting of one-third each for average fully applied risk-weighted assets (RWA), average fully applied leverage ratio denominator (LRD) and risk-based capital (RBC) to 50% each for RWA and LRD. Average fully applied RWA and LRD continue to be converted to their common equity tier 1 (CET1) capital equivalents based on capital ratios of 11% and 3.75%, respectively, both of which exceed future regulatory requirements. If the tangible attributed equity calculated under the weighted-driver approach is less than the CET1 capital equivalent of RBC for any business division, the CET1 capital equivalent of RBC will be used as a floor for that business division.

Under the revised framework, LRD and RWA held by Corporate Center – Group Asset and Liability Management (Group ALM) directly associated with activities that Corporate Center – Group ALM manages centrally on behalf of the

business divisions and other Corporate Center units are allocated to those business divisions and other Corporate Center units for the purpose of equity attribution. This allocation is primarily based on the level of high-quality liquid assets that is needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Corporate Center – Group ALM continues to retain attributed equity related to liquidity and funding surpluses, i.e., at levels above regulatory requirements, together with that related to its own activities.

In addition to tangible equity, we continue to allocate equity to our businesses to support goodwill and intangible assets. However, following the aforementioned change in the first quarter of 2017, we now also attribute to the business divisions equity for goodwill and intangible assets resulting from the acquisition of PaineWebber that until 1 January 2017 was held centrally in Group items within Corporate Center – Services under the previous framework.

We attribute all Basel III capital deduction items to Group items. These deduction items include deferred tax assets, which constitute the largest component of Group items, unrealized gains from cash flow hedges and compensation- and own shares-related components. Prior to 2017, Group items only included an amount of attributed equity for certain capital deduction items. The total amount of attributed equity now equals average shareholders' equity.

### Average attributed equity and attributed tangible equity

	Total attributed equity		Attributed tangible equity <sup>1,2</sup>
	For the year ended		For the year ended
		Prior framework	
<i>CHF billion</i>	<b>31.12.17</b>	31.12.16	31.12.15
Wealth Management	6.2	3.5	3.5
Wealth Management Americas	6.6	2.6	2.5
Personal & Corporate Banking	6.1	4.1	3.9
Asset Management	1.7	1.4	1.6
Investment Bank	9.3	7.7	7.3
Corporate Center	22.9	29.1	25.8
<i>of which: CC – Services</i>	18.9	22.8	19.6
<i>of which: Group items</i>	17.2	21.4	18.2
<i>of which: CC – Group ALM</i>	2.7	4.3	3.3
<i>of which: CC – Non-core and Legacy Portfolio</i>	1.3	2.1	2.9
<b>Average equity attributed to business divisions and Corporate Center</b>	<b>52.8</b>	48.2	44.6
Difference	0.0	5.7	7.8
<b>Average equity attributable to shareholders</b>	<b>52.8</b>	53.9	52.4

<sup>1</sup> Attributed tangible equity equals attributed equity less goodwill and intangible assets. <sup>2</sup> Attributed tangible equity is shown for the period for which Return on attributed tangible equity is available. This is a new measure introduced in 2017, accordingly no comparative period information is available.

### Return on (attributed) equity and return on (attributed) tangible equity<sup>1</sup>

In %	Return on (attributed) equity		Return on (attributed) tangible equity <sup>2</sup>
	For the year ended		For the year ended
		Prior framework	
	<b>31.12.17</b>	31.12.16	31.12.15
<b>Reported</b>			
Wealth Management	37.1	56.1	77.4
Wealth Management Americas	18.3	43.4	29.0
Personal & Corporate Banking	25.8	43.2	41.9
Asset Management	34.0	32.3	36.5
Investment Bank	13.4	13.1	25.9
<b>UBS Group<sup>3</sup></b>	<b>2.0</b>	5.9	11.8
<b>Adjusted<sup>4</sup></b>			
Wealth Management	44.6	69.0	81.4
Wealth Management Americas	20.1	48.5	33.7
Personal & Corporate Banking	27.5	43.0	42.8
Asset Management	30.9	39.4	38.1
Investment Bank	16.0	19.6	31.3
<b>UBS Group<sup>3</sup></b>	<b>3.4</b>	7.8	11.8

<sup>1</sup> Return on attributed equity and return on attributed tangible equity shown for the business divisions. Return on equity attributable to shareholders and return on tangible equity shown for the UBS Group. Return on attributed equity and return on attributed tangible equity for Corporate Center are not shown, as they are not meaningful. <sup>2</sup> This is a new measure introduced in 2017, accordingly no comparative period information is available. <sup>3</sup> Returns for UBS Group are calculated on a post-tax basis, whereas the returns for the business divisions are calculated on a pre-tax basis. <sup>4</sup> Adjusted results are non-GAAP financial measures as defined by SEC regulations.

# UBS shares

## UBS Group AG shares

**Audited** | As of 31 December 2017, IFRS equity attributable to shareholders amounted to CHF 51,214 million, represented by 3,853,096,603 shares issued. Shares issued increased by 2,330,214 shares in 2017 due to the issuance of shares out of conditional share capital upon exercise of employee share options.

Each share has a par value of CHF 0.10 and entitles the holder to one vote at the UBS Group AG shareholders' meeting, if entered into the share register as having the right to vote, and also a proportionate share of distributed dividends. As the Articles of Association of UBS Group AG indicate, there are no other classes of shares and no preferential rights for shareholders. ▲

→ Refer to the "Corporate governance" section of this report for more information on UBS shares

## UBS Group share information

	As of or for the year ended		% change from
	31.12.17	31.12.16	31.12.16
Shares issued	3,853,096,603	3,850,766,389	0
Treasury shares	132,301,550	138,441,772	(4)
Shares outstanding	3,720,795,053	3,712,324,617	0
Basic earnings per share (CHF) <sup>1</sup>	0.28	0.86	(67)
Diluted earnings per share (CHF) <sup>1</sup>	0.27	0.84	(68)
Equity attributable to shareholders (CHF million)	51,214	53,621	(4)
Less: goodwill and intangible assets (CHF million)	6,398	6,556	(2)
Tangible equity attributable to shareholders (CHF million)	44,816	47,065	(5)
Total book value per share (CHF)	13.76	14.44	(5)
Tangible book value per share (CHF)	12.04	12.68	(5)
Share price (CHF)	17.94	15.95	12
Market capitalization (CHF million) <sup>2</sup>	69,125	61,420	13

<sup>1</sup> Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. <sup>2</sup> Market capitalization is calculated as total shares issued multiplied by the share price at the end of the period.

### Holding of UBS Group AG shares

Group Treasury holds UBS Group AG shares to hedge future share delivery obligations related to employee share-based compensation awards. In addition, the Investment Bank holds a limited number of UBS Group AG shares, primarily in its capacity as a market-maker in UBS Group AG shares and related derivatives and to hedge certain issued structured debt instruments. As of 31 December 2017, we held a total of 132,301,550 treasury shares (31 December 2016: 138,441,772), or 3.4% (31 December 2016: 3.6%) of shares issued.

Share delivery obligations related to employee share-based compensation awards totaled 166 million shares as of 31 December 2017 (31 December 2016: 166 million). Share

delivery obligations are calculated on the basis of unvested notional share awards, options and stock appreciation rights, taking applicable performance conditions into account. Treasury shares held are delivered to employees at exercise or vesting. However, share delivery obligations related to certain options and stock appreciation rights can also be satisfied by shares issued out of conditional capital. As of 31 December 2017, the number of UBS Group AG shares that could have been issued out of conditional capital for this purpose was 128 million (31 December 2016: 130 million).

The table below outlines the market purchases of UBS Group AG shares by Group Treasury. It does not include the activities of the Investment Bank.

### Treasury share purchases<sup>1</sup>

Month of purchase	Treasury shares purchased		Number of shares (cumulative)	Average price in CHF
	Number of shares	Average price in CHF		
January 2017				
February 2017				
March 2017	34,000,000	15.99	34,000,000	15.99
April 2017			34,000,000	15.99
May 2017			34,000,000	15.99
June 2017			34,000,000	15.99
July 2017			34,000,000	15.99
August 2017			34,000,000	15.99
September 2017			34,000,000	15.99
October 2017			34,000,000	15.99
November 2017			34,000,000	15.99
December 2017			34,000,000	15.99

<sup>1</sup> This table excludes purchases for the purpose of hedging derivatives linked to UBS Group AG shares and for market-making in UBS Group AG shares. The table also excludes UBS Group AG shares purchased by pension and retirement benefit funds for UBS employees, which are managed by a board of UBS management and employee representatives in accordance with Swiss law. UBS's pension and other post-employment benefit funds purchased 904,558 UBS Group AG shares during the year and held 16,370,040 UBS Group AG shares as of 31 December 2017.

### Trading volumes

1,000 shares	For the year ended		
	31.12.17	31.12.16	31.12.15
SIX Swiss Exchange total	3,084,804	3,761,294	2,870,766
SIX Swiss Exchange daily average	12,290	14,808	11,437
New York Stock Exchange total	146,902	160,887	102,069
New York Stock Exchange daily average	585	638	405

Source: Reuters



## Listing of UBS Group AG shares

UBS Group AG shares are listed on the SIX Swiss Exchange (SIX). They are also listed on the New York Stock Exchange (NYSE) as global registered shares. As such, they can be traded and transferred across applicable borders without the need for conversion, with identical shares traded on different stock exchanges in different currencies.

During 2017, the average daily trading volume of UBS Group AG shares was 12.3 million shares on the SIX and 0.6 million shares on the NYSE. The SIX is expected to remain the main venue for determining the movement in our share price due to the high volume traded on this exchange.

During the hours in which both the SIX and the NYSE are simultaneously open for trading (generally 3:30 p.m. to 5:30 p.m. Central European Time), price differences between these exchanges are likely to be arbitrated away by professional market-makers. Accordingly, the share price will typically be similar between the two exchanges when considering the prevailing US dollar / Swiss franc exchange rate. When the SIX is closed for trading, globally traded volumes will typically be lower. However, the specialist firm making a market in UBS Group AG shares on the NYSE is required to facilitate sufficient liquidity and maintain an orderly market in UBS Group AG shares throughout normal NYSE trading hours.

### Ticker symbols UBS Group AG

Trading exchange	SIX/NYSE	Bloomberg	Reuters
SIX Swiss Exchange	UBSG	UBSG SW	UBSG.S
New York Stock Exchange	UBS	UBS UN	UBS.N

### Security identification codes

ISIN	CH0244767585
Valoren	24 476 758
CUSIP	CINS H42097 10 7

### Stock exchange prices<sup>1</sup>

	SIX Swiss Exchange			New York Stock Exchange		
	High (CHF)	Low (CHF)	Period end (CHF)	High (USD)	Low (USD)	Period end (USD)
<b>2018</b>						
February	19.20	17.09	18.07	20.69	18.15	18.97
January	19.77	18.04	18.90	20.89	18.45	20.32
<b>2017</b>	<b>18.24</b>	<b>15.11</b>	<b>17.94</b>	<b>18.47</b>	<b>15.11</b>	<b>18.39</b>
<b>Fourth quarter 2017</b>	<b>18.24</b>	<b>16.46</b>	<b>17.94</b>	<b>18.47</b>	<b>16.80</b>	<b>18.39</b>
December	18.24	16.78	17.94	18.47	16.97	18.39
November	17.18	16.47	16.99	17.39	16.80	17.18
October	17.60	16.46	16.98	17.47	16.89	17.01
<b>Third quarter 2017</b>	<b>17.42</b>	<b>15.36</b>	<b>16.55</b>	<b>18.31</b>	<b>16.08</b>	<b>17.15</b>
September	16.60	15.36	16.55	17.15	16.08	17.15
August	17.11	15.57	15.80	17.66	16.37	16.44
July	17.42	16.32	16.82	18.31	17.15	17.43
<b>Second quarter 2017</b>	<b>17.49</b>	<b>15.13</b>	<b>16.24</b>	<b>17.71</b>	<b>15.11</b>	<b>16.98</b>
<b>First quarter 2017</b>	<b>17.49</b>	<b>15.11</b>	<b>16.03</b>	<b>17.26</b>	<b>15.24</b>	<b>15.95</b>
<b>2016</b>	<b>19.32</b>	<b>11.58</b>	<b>15.95</b>	<b>19.14</b>	<b>11.94</b>	<b>15.67</b>
Fourth quarter 2016	17.73	12.97	15.95	17.44	13.22	15.67
Third quarter 2016	14.53	11.58	13.23	14.88	11.94	13.62
Second quarter 2016	16.85	12.24	12.57	17.37	12.46	12.96
First quarter 2016	19.32	13.51	15.49	19.14	14.01	16.02
<b>2015</b>	<b>22.57</b>	<b>13.58</b>	<b>19.52</b>	<b>23.19</b>	<b>16.02</b>	<b>19.37</b>
<b>2014</b>	<b>19.10</b>	<b>13.95</b>	<b>17.09</b>	<b>21.50</b>	<b>15.04</b>	<b>17.05</b>
<b>2013</b>	<b>19.60</b>	<b>14.09</b>	<b>16.92</b>	<b>21.61</b>	<b>15.09</b>	<b>19.25</b>

<sup>1</sup> Based on the share price of UBS AG until 27 November 2014 and of UBS Group AG from 28 November 2014 onward.



# Corporate governance, responsibility and compensation

## Management report

### Audited information according to the Swiss law and applicable regulatory requirements and guidance

Disclosures provided are in line with the requirements of article 663c para. 1 and 3 of the Swiss Code of Obligations (supplementary disclosures for companies whose shares are listed on a stock exchange: shareholdings) and the Ordinance against Excessive Compensation in Listed Stock Corporations (tables containing such information are marked as “Audited” throughout this section), as well as other applicable regulations and guidance.

### Information assured according to the Global Reporting Initiative (GRI)

Content of the sections “UBS and Society” and “Our employees” has been reviewed by Ernst & Young Ltd (EY) against the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. This content has been prepared in accordance with the GRI Standards: Comprehensive option as evidenced in the EY assurance report at [www.ubs.com/gri](http://www.ubs.com/gri). The limited assurance by EY also covered other relevant text and data in the UBS GRI Document.

# Corporate governance

UBS Group AG is subject to, and compliant with, all relevant Swiss legal and regulatory requirements regarding corporate governance, including the SIX Swiss Exchange's Directive on Information Relating to Corporate Governance, as well as the standards established in the Swiss Code of Best Practice for Corporate Governance, including the appendix on executive compensation.

In addition, as a foreign company with shares listed on the New York Stock Exchange (NYSE), UBS Group AG complies with all relevant corporate governance standards applicable to foreign private issuers.

The Organization Regulations of UBS Group AG, adopted by the Board of Directors (BoD) based on article 716b of the Swiss Code of Obligations and articles 25 and 27 of the Articles of Association of UBS Group AG (AoA), constitute our primary corporate governance guidelines.

To the extent practicable, the governance structures of UBS Group AG and UBS AG are aligned. UBS AG complies with all relevant Swiss legal and regulatory corporate governance requirements. As a foreign private issuer with debt securities listed on the NYSE, UBS AG also complies with the relevant NYSE corporate governance standards. The discussion in this section refers to both UBS Group AG and UBS AG, unless specifically noted otherwise or unless the information discussed is relevant only to companies with listed shares and therefore only applicable to UBS Group AG. This is in line with US Securities and Exchange Commission regulations and NYSE listing standards.

→ **Refer to the Articles of Association of UBS Group AG and of UBS AG, and the Organization Regulations of UBS Group AG at [www.ubs.com/governance](http://www.ubs.com/governance) for more information**

## Differences from corporate governance standards relevant to US-listed companies

According to the NYSE listing standards on corporate governance, foreign private issuers are required to disclose any significant ways in which their corporate governance practices differ from those that have to be followed by domestic companies. These differences are discussed in the following paragraphs.

### Responsibility of the Audit Committee with regard to independent auditors

Our Audit Committee is responsible for the compensation, retention and oversight of the independent auditors. It assesses the performance and qualification of the external auditors and submits its proposal for appointment, reappointment or removal of the independent auditors to the full BoD. As required by the Swiss Code of Obligations, the BoD then submits its proposal to the shareholders for their vote at the Annual General Meeting (AGM). Under NYSE standards, the Audit Committee is also responsible for the appointment of the independent auditors.

### Discussion of risk assessment and risk management policies by the Risk Committee

In accordance with the respective Organization Regulations of UBS Group AG and UBS AG, the Risk Committee instead of the Audit Committee oversees our risk principles and risk capacity on behalf of the BoD. The Risk Committee is responsible for monitoring our adherence to those risk principles and for monitoring whether business divisions and control units maintain appropriate systems of risk management and control.

### Supervision of the internal audit function

The Chairman of the BoD (Chairman) and the Audit Committee share the supervisory responsibility and authority with respect to the internal audit function. Under NYSE standards, only the Audit Committee supervises the internal audit function.

### Responsibility of the Compensation Committee for performance evaluations of senior management of UBS Group AG

Under NYSE standards, it is the responsibility of the Compensation Committee to evaluate senior management performance and determine and approve, as a committee or together with the other independent directors, its compensation. In line with Swiss law, our Compensation Committee, together with the BoD, proposes for shareholder approval at the AGM the maximum aggregate amount of compensation for the BoD, the maximum aggregate amount of fixed compensation for the Group Executive Board (GEB) and the aggregate amount of variable compensation for the GEB. The shareholders elect the members of the Compensation Committee at the AGM.

### Proxy statement reports of the Audit Committee and the Compensation Committee

NYSE listing standards would require the aforementioned committees to submit their reports directly to shareholders. However, under Swiss law, all our reports addressed to shareholders, including those from the aforementioned committees, are provided and approved by the BoD, which has ultimate responsibility to the shareholders.

### Shareholders' votes on equity compensation plans

While the NYSE standards would require shareholder approval for the establishment of and material revisions to all equity compensation plans, Swiss law authorizes the BoD to approve compensation plans. Swiss companies determine the nature and components of capital in their articles of association, and each increase in capital requires shareholder approval. This means that shareholder approval is mandatory if equity-based compensation plans require an increase in capital. No shareholder approval is required if shares for such plans are purchased in the market.

- **Refer to "Board of Directors" in this section for more information on the Board of Directors' committees**
- **Refer to "Capital structure" in this section for more information on UBS Group AG's capital**

## Group structure and shareholders

### Operational Group structure

As of 31 December 2017, the operational structure of the Group comprised the business divisions Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management, and the Investment Bank, as well as Corporate Center with its units Corporate Center – Services (comprising the Group functions Group Chief Operating Officer area, Group Finance, Group Human Resources, Group Risk Control, Group General Counsel area, Group Regulatory & Governance, Communications & Branding and UBS and Society), Corporate Center – Group Asset and Liability Management and Corporate Center – Non-core and Legacy Portfolio. Effective 1 February 2018, Wealth Management and Wealth Management Americas were combined into a unified business division called Global Wealth Management.

- Refer to the sections under “Financial and operating performance” from page 57 and to “Note 2 Segment reporting” in the “Consolidated financial statements” section from page 352 of this report for more information
- Refer to the “Our evolution” section from page 12 of this report for more information

### Listed and non-listed companies belonging to the Group

The Group includes a number of consolidated entities, of which only UBS Group AG has its shares listed.

UBS Group AG’s registered office is at Bahnhofstrasse 45, CH-8001 Zurich, Switzerland. The shares of UBS Group AG are listed on the SIX Swiss Exchange (ISIN: CH0244767585) and on the NYSE (CUSIP: H42097107).

- Refer to “UBS shares” in the “Capital management” section from page 205 of this report for information on UBS Group AG’s market capitalization and shares held by Group entities
- Refer to “Note 28 Interests in subsidiaries and other entities” in the “Consolidated financial statements” section from page 440 of this report for more information on the significant subsidiaries of the Group

### Significant shareholders

Under the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 19 June 2015 (FMIA), anyone holding shares in a company listed in Switzerland, or holding derivative rights related to shares of such a company, must notify the company and the SIX Swiss Exchange (SIX) if the holding reaches, falls below or exceeds one of the following thresholds: 3, 5, 10, 15, 20, 25, 33 $\frac{1}{3}$ , 50, or 66 $\frac{2}{3}$ % of voting rights, regardless of whether or not such rights may be exercised. The detailed disclosure requirements and the methodology for calculating the thresholds are defined in the Swiss Financial Market Supervisory Authority Ordinance on Financial Market Infrastructure (FMIO-FINMA). In particular, the FMIO-FINMA sets forth that nominee companies that cannot autonomously decide how voting rights are exercised are not obligated to notify the company and the SIX if they reach, exceed or fall below the threshold percentages.

In addition, pursuant to the Swiss Code of Obligations, we must disclose in the notes to our financial statements the identity of any shareholder with a holding of more than 5% of the total share capital of UBS Group AG.

According to the FMIA disclosure notifications filed with UBS Group AG and the SIX, the following entities held more than 3% of the total share capital of UBS Group AG as of 31 December 2017: BlackRock Inc., New York, disclosed a holding of 5.01% of the total share capital of UBS Group AG on 29 December 2017; MFS Investment Management, Boston, disclosed a holding of 3.05% on 10 February 2016; and Norges Bank, Oslo, the central bank of Norway, disclosed a holding of 3.30% on 10 December 2014. With the exception of BlackRock Inc., New York, with a disclosed holding of 5.02% of the total share capital of UBS Group AG on 5 March 2018, the above disclosures have not been subsequently superseded and no new disclosures of significant shareholdings have been notified since 31 December 2017.

In accordance with the FMIA, the aforementioned holdings are calculated in relation to the total share capital of UBS Group AG reflected in its Articles of Association at the time of the respective disclosure notification.

Shareholders who notified a significant shareholding in accordance with the aforementioned requirements may or may not be recorded in the UBS share register, and therefore they may not necessarily appear in the table below. Information on disclosures under the FMIA is available at [www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html](http://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html).

The shareholders (acting in their own name or in their capacity as nominees for other investors or beneficial owners) listed in the table below were registered in the UBS share register with 3% or more of the total share capital of UBS Group AG as of 31 December 2017.

### Cross-shareholdings

UBS Group AG has no cross-shareholdings in excess of a reciprocal ownership of 5% of capital or voting rights with any other company.

Audited |

#### Shareholders registered in the UBS share register with 3% or more of the total share capital

<i>% of share capital</i>	31.12.17	31.12.16	31.12.15
Chase Nominees Ltd., London	11.16	9.43	9.14
DTC (Cede & Co.), New York <sup>1</sup>	6.64	6.62	6.14
Nortrust Nominees Ltd., London	4.11	3.88	3.60

<sup>1</sup> DTC (Cede & Co.), New York, "The Depository Trust Company," is a US securities clearing organization.



## Capital structure

### Issued ordinary share capital

At year-end 2017, UBS Group AG had 3,853,096,603 issued shares with a par value of CHF 0.10 each, leading to a share capital of CHF 385,309,660.30.

Under Swiss company law, shareholders must approve in a shareholders' meeting any increase in the total number of shares

that may arise from an ordinary share capital increase or the creation of conditional or authorized capital. In 2017, our shareholders were not asked to approve any capital increase.

Share capital increased during the year by 2,330,214 shares, as shares were issued out of existing conditional capital due to the exercise of employee options.

### Issued share capital of UBS Group AG

	Share capital in CHF	Number of shares	Par value in CHF
As of 31 December 2016	385,076,639	3,850,766,389	0.10
Issue of shares out of conditional capital due to employee options exercised in 2017	233,021	2,330,214	0.10
As of 31 December 2017	385,309,660	3,853,096,603	0.10

### Distribution of UBS shares

As of 31 December 2017 <i>Number of shares registered</i>	Shareholders registered		Shares registered	
	Number	%	Number	% of shares issued
1–100	26,007	11.3	1,460,688	0.0
101–1,000	123,604	53.6	58,321,655	1.5
1,001–10,000	73,920	32.1	208,480,350	5.4
10,001–100,000	6,438	2.8	151,912,554	3.9
100,001–1,000,000	524	0.2	154,010,127	4.0
1,000,001–5,000,000	83	0.0	172,747,303	4.5
5,000,001–38,530,966 (1%)	30	0.0	349,217,167	9.1
1–2%	2	0.0	109,797,617	2.8
2–3%	1	0.0	88,559,109	2.3
3–4%	0	0.0	0	0.0
4–5%	1	0.0	158,270,547	4.1
Over 5%	2 <sup>1</sup>	0.0	685,945,874	17.8
Total registered	230,612	100.0	2,138,722,991 <sup>2</sup>	55.5
Unregistered <sup>3</sup>			1,714,373,612	44.5
<b>Total shares issued</b>			<b>3,853,096,603</b>	<b>100.0</b>

<sup>1</sup> On 31 December 2017, Chase Nominees Ltd., London, entered as a trustee / nominee, was registered with 11.16% of all UBS shares issued. However, according to the provisions of UBS Group AG, voting rights of trustees / nominees are limited to a maximum of 5% of all UBS shares issued. The US securities clearing organization DTC (Cede & Co.), New York, was registered with 6.64% of all UBS shares issued and is not subject to this 5% voting limit as a securities clearing organization. <sup>2</sup> Of the total shares registered, 410,395,903 shares did not carry voting rights. <sup>3</sup> Shares not entered in the UBS share register as of 31 December 2017.



## Conditional share capital

At year-end 2017, the following conditional share capital was available to UBS Group AG's BoD:

- a maximum of CHF 38,000,000 represented by up to 380,000,000 fully paid registered shares with a nominal value of CHF 0.10 each, to be issued through the voluntary or mandatory exercise of conversion rights and / or warrants granted in connection with the issuance of bonds or similar financial instruments on national or international capital markets. This conditional capital allowance was approved at the Extraordinary General Meeting (EGM) held on 26 November 2014. The BoD has not made use of such allowance.

- a maximum of CHF 12,766,462.20 represented by 127,664,622 fully paid registered shares with a par value of CHF 0.10 each, to be issued upon exercise of employee options issued to employees and members of the management and of the BoD of UBS Group AG and its subsidiaries. This conditional capital allowance was approved by the shareholders at the same EGM in 2014.

→ **Refer to article 4a of the Articles of Association of UBS Group AG for more information on the terms and conditions of the issue of shares out of existing conditional capital. The Articles of Association are available at [www.ubs.com/governance](http://www.ubs.com/governance)**

## Conditional capital of UBS Group AG

As of 31 December 2017	Maximum number of shares to be issued	Year approved by Extraordinary General Meeting	% of shares issued
Employee equity participation plans	127,664,622	2014	3.31
Conversion rights / warrants granted in connection with bonds	380,000,000	2014	9.86
<b>Total</b>	<b>507,664,622</b>		<b>13.18</b>

## Authorized share capital

UBS Group AG had no authorized capital available on 31 December 2017.

## Changes in capital

In accordance with International Financial Reporting Standards, Group equity attributable to shareholders amounted to CHF 51.2 billion as of 31 December 2017 (2016: CHF 53.6 billion; and 2015: CHF 55.3 billion). UBS Group AG shareholders' equity was represented by 3,853,096,603 issued shares as of 31 December 2017 (2016: 3,850,766,389 shares; and 2015: 3,849,731,535 shares).

- **Refer to "Statement of changes in equity" in the "Consolidated financial statements" section from page 322 of this report, and our annual reports 2016 and 2015 available under "Annual reporting" at [www.ubs.com/investors](http://www.ubs.com/investors), for more information on changes in shareholders' equity over the last three years**

## Ownership

Ownership of UBS Group AG shares is widely spread. The tables in this section provide information about the distribution of UBS Group AG shareholders by category and geographic location. This information relates only to shareholders registered in the UBS share register and cannot be assumed to be representative of UBS Group AG's entire investor base or the actual beneficial ownership. Only shareholders registered in the share register as "shareholders with voting rights" are entitled to exercise voting rights.

- **Refer to "Shareholders' participation rights" in this section for more information**

As of 31 December 2017, 1,728,327,088 UBS Group AG shares carried voting rights, 410,395,903 shares were entered in the share register without voting rights, and 1,714,373,612 shares were not registered in the UBS share register. All shares were fully paid up and eligible for dividends. There are no preferential rights for shareholders, and no other classes of shares are issued by UBS Group AG.

## Shareholders, legal entities and nominees: type and geographical distribution

As of 31 December 2017	Shareholders registered							
	Number		%		Number		%	
Individual shareholders	225,511		97.8					
Legal entities	4,855		2.1					
Nominees, fiduciaries	246		0.1					
Total registered shares								
Unregistered shares								
<b>Total</b>	<b>230,612</b>		<b>100.0</b>					

	Individual shareholders		Legal entities		Nominees		Total	
	Number	%	Number	%	Number	%	Number	%
<b>Americas</b>	<b>5,779</b>	<b>2.5</b>	<b>171</b>	<b>0.1</b>	<b>111</b>	<b>0.0</b>	<b>6,061</b>	<b>2.6</b>
<i>of which: USA</i>	<i>5,118</i>	<i>2.2</i>	<i>95</i>	<i>0.0</i>	<i>105</i>	<i>0.0</i>	<i>5,318</i>	<i>2.3</i>
<b>Asia Pacific</b>	<b>5,127</b>	<b>2.2</b>	<b>124</b>	<b>0.1</b>	<b>22</b>	<b>0.0</b>	<b>5,273</b>	<b>2.3</b>
<b>Europe, Middle East and Africa</b>	<b>12,196</b>	<b>5.3</b>	<b>256</b>	<b>0.1</b>	<b>72</b>	<b>0.0</b>	<b>12,524</b>	<b>5.4</b>
<i>of which: Germany</i>	<i>4,175</i>	<i>1.8</i>	<i>27</i>	<i>0.0</i>	<i>6</i>	<i>0.0</i>	<i>4,208</i>	<i>1.8</i>
<i>of which: UK</i>	<i>4,386</i>	<i>1.9</i>	<i>10</i>	<i>0.0</i>	<i>6</i>	<i>0.0</i>	<i>4,402</i>	<i>1.9</i>
<i>of which: rest of Europe</i>	<i>3,415</i>	<i>1.5</i>	<i>214</i>	<i>0.1</i>	<i>59</i>	<i>0.0</i>	<i>3,688</i>	<i>1.6</i>
<i>of which: Middle East and Africa</i>	<i>220</i>	<i>0.1</i>	<i>5</i>	<i>0.0</i>	<i>1</i>	<i>0.0</i>	<i>226</i>	<i>0.1</i>
<b>Switzerland</b>	<b>202,409</b>	<b>87.8</b>	<b>4,304</b>	<b>1.9</b>	<b>41</b>	<b>0.0</b>	<b>206,754</b>	<b>89.7</b>
Total registered shares								
Unregistered shares								
<b>Total</b>	<b>225,511</b>	<b>97.8</b>	<b>4,855</b>	<b>2.1</b>	<b>246</b>	<b>0.1</b>	<b>230,612</b>	<b>100.0</b>

At year-end 2017, UBS owned 132,301,551 UBS Group AG registered shares, which corresponded to 3.43% of the total share capital of UBS Group AG. At the same time, we had acquisition and disposal positions relating to 148,166,748 and 198,285,873 voting rights of UBS Group AG, corresponding to 3.85% and 5.15% of the total voting rights of UBS Group AG, respectively. Of the disposal positions, 4.93% consisted of voting rights on shares deliverable in respect of employee awards. The calculation methodology for the acquisition and disposal positions is based on the FMIO-FINMA, which sets forth that all future potential share delivery obligations, irrespective of the contingent nature of the delivery, must be taken into account.

### Employee share ownership

Employee share ownership is encouraged and enabled in a variety of ways. One example is our Equity Plus Plan. This is a voluntary plan that provides eligible employees with the opportunity to purchase UBS Group AG shares at market value and receive, at no additional cost, one notional UBS Group AG share for every three shares purchased. If the shares purchased are held for three years and the employee remains in employment, the notional shares vest. Another example is the Equity Ownership Plan (EOP). This is a mandatory deferral plan for all employees with total compensation greater than CHF 300,000. These employees receive at least 60% of their deferred performance award under the EOP in notional shares. The plan includes provisions that allow the firm to reduce or fully forfeit the unvested deferred portion of the granted EOP award if an employee commits certain harmful acts, and in most cases trigger

forfeiture where employment has been terminated. To encourage our employees to develop and manage the business in a way that delivers sustainable returns, EOP awards granted to GEB members and other senior employees will only vest if both Group and business division performance conditions are met.

As of 31 December 2017, current UBS employees held an estimated 6% of UBS shares outstanding (including approximately 4% in unvested / blocked actual and notional shares from our compensation programs). These figures are based on known shareholding information from employee participation plans, personal holdings with UBS and selected individual retirement plans. At the end of 2017, an estimated 36% of all employees held UBS shares with the firm's employee participation plan platform.

→ Refer to the "Compensation" section from page 262 of this report for more information

### Shares and participation certificates

UBS Group AG has a single class of shares, which are registered shares in the form of uncertificated securities (in the sense of the Swiss Code of Obligations) and intermediary-held securities (in the sense of the Swiss Federal Act on Intermediated Securities of 3 October 2008, as amended). Each registered share has a par value of CHF 0.10 and carries one vote subject to the restrictions set out under "Transferability, voting rights and nominee registration" on the following page.

We have no participation certificates outstanding.

						Shares registered	
						Number	%
						415,977,640	10.8
						589,798,155	15.3
						1,132,947,196	29.4
						2,138,722,991	55.5
						1,714,373,612	44.5
						<b>3,853,096,603</b>	<b>100.0</b>
Individual shareholders		Legal entities		Nominees		Total	
Number of shares	%	Number of shares	%	Number of shares	%	Number of shares	%
<b>10,525,257</b>	<b>0.3</b>	<b>77,542,826</b>	<b>2.0</b>	<b>354,052,813</b>	<b>9.2</b>	<b>442,120,896</b>	<b>11.5</b>
<i>8,905,338</i>	<i>0.2</i>	<i>64,017,846</i>	<i>1.7</i>	<i>353,756,503</i>	<i>9.2</i>	<i>426,679,687</i>	<i>11.1</i>
<b>21,763,450</b>	<b>0.6</b>	<b>69,848,519</b>	<b>1.8</b>	<b>9,117,835</b>	<b>0.2</b>	<b>100,729,804</b>	<b>2.6</b>
<b>38,509,849</b>	<b>1.0</b>	<b>24,878,365</b>	<b>0.6</b>	<b>748,615,167</b>	<b>19.4</b>	<b>812,003,381</b>	<b>21.1</b>
<i>12,491,164</i>	<i>0.3</i>	<i>579,599</i>	<i>0.0</i>	<i>16,296,379</i>	<i>0.4</i>	<i>29,367,142</i>	<i>0.8</i>
<i>16,644,427</i>	<i>0.4</i>	<i>2,161,855</i>	<i>0.1</i>	<i>646,433,414</i>	<i>16.8</i>	<i>665,239,696</i>	<i>17.3</i>
<i>8,740,699</i>	<i>0.2</i>	<i>21,917,846</i>	<i>0.6</i>	<i>85,875,374</i>	<i>2.2</i>	<i>116,533,919</i>	<i>3.0</i>
<i>633,559</i>	<i>0.0</i>	<i>219,065</i>	<i>0.0</i>	<i>10,000</i>	<i>0.0</i>	<i>862,624</i>	<i>0.0</i>
<b>345,179,084</b>	<b>9.0</b>	<b>417,528,445</b>	<b>10.8</b>	<b>21,161,381</b>	<b>0.5</b>	<b>783,868,910</b>	<b>20.3</b>
415,977,640	10.8	589,798,155	15.3	1,132,947,196	29.4	2,138,722,991	55.5
0		0		0		1,714,373,612	44.5
<b>415,977,640</b>	<b>10.8</b>	<b>589,798,155</b>	<b>15.3</b>	<b>1,132,947,196</b>	<b>29.4</b>	<b>3,853,096,603</b>	<b>100.0</b>

Our shares are listed on the NYSE as global registered shares. As such, they can be traded and transferred across applicable borders, without the need for conversion, with identical shares traded on different stock exchanges in different currencies.

→ Refer to "UBS shares" in the "Capital management" section from page 205 of this report for more information

### Distributions to shareholders

The decision to pay a dividend and the amount of any dividend depend on a variety of factors, including our profits and cash flow generation and the maintenance of our targeted capital ratios.

At the AGM 2018, UBS's BoD intends to propose to shareholders a dividend of CHF 0.65 per share to be paid out of the capital contribution reserve, subject to shareholder approval. In addition, the BoD has approved a share repurchase program of up to CHF 2 billion over the next three years, of which up to CHF 550 million may be purchased in 2018.

### Transferability, voting rights and nominee registration

We do not apply any restrictions or limitations on the transferability of shares. Voting rights may be exercised without any restrictions by shareholders entered into the share register if they expressly render a declaration of beneficial ownership according to the provisions of the Articles of Association.

We have special provisions for the registration of fiduciaries and nominees. Fiduciaries and nominees are entered in the share register with voting rights up to a total of 5% of all issued UBS Group AG shares if they agree to disclose, upon our request,

beneficial owners holding 0.3% or more of all issued UBS Group AG shares. An exception to the 5% voting limit rule is in place for securities clearing organizations, such as The Depository Trust Company in New York.

→ Refer to "Shareholders' participation rights" in this section for more information

### Convertible bonds and options

As of 31 December 2017, there were no contingent capital securities or convertible bonds outstanding requiring the issuance of new shares.

→ Refer to the "Capital management" section from page 183 of this report for more information on our outstanding capital instruments

As of 31 December 2017, there were 41,096,583 employee options outstanding, including stock appreciation rights. Options and stock appreciation rights equivalent to 11,761,722 shares were in the money and exercisable. Option-based compensation plans are sourced by either purchasing UBS Group AG shares in the market or issuing new shares out of conditional capital. As mentioned above, as of 31 December 2017, 127,664,622 unissued shares in conditional share capital were available for this purpose.

→ Refer to "Conditional share capital" in this section for more information

→ Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section from page 432 of this report for more information on outstanding options and stock appreciation rights

## Shareholders' participation rights

We are committed to shareholder participation in our decision-making process. Around 230,000 shareholders are directly registered in the UBS share register and some 140,000 US shareholders are registered via nominee companies.

Registered shareholders are personally invited to the general meetings of shareholders. Together with the invitation materials to the general meeting, they will receive a one-time password and a QR code to log in to our new online voting platform, where they can enter their voting instructions or order an admission card for the general meeting.

Shareholders who decide not to receive the comprehensive invitation materials are informed of the upcoming general meeting by a short letter containing a one-time password, a QR code and a reference to [www.ubs.com/agm](http://www.ubs.com/agm), where all information for the upcoming general meeting is available.

### Relations with shareholders

We regularly inform all our shareholders about our activities and performance and other developments.

→ **Refer to "Information policy" in this section for more information**

The annual general meeting of shareholders (AGM) offers shareholders the opportunity to raise any questions to the Board of Directors (BoD) and Group Executive Board, as well as to our internal and external auditors.

### Voting rights, restrictions and representation

We place no restrictions on share ownership and voting rights. However, pursuant to general principles formulated by the BoD, nominee companies and trustees, who normally represent a large number of individual shareholders and may hold an unlimited number of shares, have voting rights limited to a maximum of 5% of all issued UBS Group AG shares in order to avoid the risk of unknown shareholders with large stakes being entered in the share register. Securities clearing organizations, such as The Depository Trust Company in New York, are not subject to this 5% voting limit.

Shareholders can exercise their voting rights conferred by the shares only if they are registered in our share register with voting rights. To register, shareholders must confirm that they have acquired UBS Group AG shares in their own name and for their own account. Nominee companies and trustees are required to sign an agreement confirming their willingness to disclose, upon our request, individual beneficial owners holding more than 0.3% of all issued UBS Group AG shares.

All shareholders registered with voting rights are entitled to participate in general meetings of shareholders. If they do not wish to attend in person, they may issue instructions to support, reject or abstain for each individual item on the meeting agenda, either by giving instructions to an independent proxy in accordance with article 15 of the Articles of Association (AoA) or by appointing another registered shareholder of their choice to vote on their behalf. Alternatively, registered shareholders may issue their voting instructions to the independent proxy electronically through our online voting platform. Nominee companies normally submit the proxy material to the beneficial owners and forward the collected votes to the independent proxy.

→ **Refer to article 15 of the Articles of Association of UBS Group AG for more information on the issuing of instructions to independent voting right representatives. The Articles of Association are available at [www.ubs.com/governance](http://www.ubs.com/governance)**

### Statutory quorums

Motions, including the election and re-election of BoD members and the election of the auditors, are decided at a general meeting of shareholders by an absolute majority of the votes cast, excluding blank and invalid ballots. For the approval of certain specific issues, the Swiss Code of Obligations requires a positive vote from a two-thirds majority of the votes represented at a general meeting of shareholders, and from the absolute majority of the par value of shares represented at the meeting. Such issues include the creation of shares with privileged voting rights, the introduction of restrictions on the transferability of registered shares, conditional and authorized capital increases, and restrictions or exclusions of shareholders' preemptive rights.

The AoA also require a two-thirds majority of votes represented for approval of any change to their provisions regarding the number of BoD members, any decision to remove one-quarter or more of the BoD members, and any modification to the provision establishing this qualified quorum.

Votes and elections are normally conducted electronically to ascertain the exact number of votes cast. Voting by a show of hands remains possible if a clear majority is predictable. Shareholders representing at least 3% of the votes represented may request that a vote or election be carried out electronically or by written ballot. In order to allow shareholders to clearly express their views on all individual topics, each item on the agenda is put to a vote separately and BoD members are elected on a person-by-person basis.

## Convocation of general meetings of shareholders

The AGM must be held within six months of the close of the financial year (31 December) and normally takes place in early May.

A personal invitation including a detailed agenda and explanation of each motion is made available to every registered shareholder at least 20 days ahead of the scheduled general meeting. The meeting agenda is also published in the Swiss Official Gazette of Commerce as well as at [www.ubs.com/agm](http://www.ubs.com/agm).

Extraordinary General Meetings may be convened whenever the BoD or the auditors consider it necessary. Shareholders individually or jointly representing at least 10% of the share capital may at any time, including during an AGM, ask in writing for an Extraordinary General Meeting to be convened to address a specific issue they put forward.

## Placing of items on the agenda

Pursuant to our AoA, shareholders individually or jointly representing shares with an aggregate minimum par value of CHF 62,500 may submit proposals for matters to be placed on the agenda for consideration at the next general meeting of shareholders.

At the beginning of February of each year, the invitation to submit such proposals is published in the Swiss Official Gazette of Commerce and at [www.ubs.com/agm](http://www.ubs.com/agm). Requests for items to be placed on the agenda must include the actual motions to be put forward, together with a short explanation. Such requests must be submitted to the BoD 50 days before the general meeting of shareholders, including a statement from the depository bank confirming the number of shares held by the requesting shareholder and that these shares are blocked from sale until the end of the general meeting of shareholders. The BoD formulates opinions on the proposals, which are published together with the motions.

## Registrations in the share register

The share register of UBS Group AG is an internal, non-public register subject to statutory confidentiality, secrecy, privacy and data protection regulations, which are imposed on UBS Group AG to protect shareholders registered therein. In general, third parties and shareholders have no inspection rights with regard to data related to other shareholders. Disclosure of private data is permitted only in specific and limited instances. In line with the Swiss Federal Act on Data Protection, the disclosure of private data is only allowed with the consent of the registered shareholder and in cases where there is an overriding private or public interest or if explicitly provided by Swiss law. The law contains specific reporting duties, such as in relation to significant shareholders (refer to the "Significant shareholders" section of this report for more information). Disclosure may also be required or requested by a court of a competent jurisdiction, by any regulatory body that regulates the conduct of UBS Group AG or by other statutory provisions.

The general rules for entry into our Swiss share register with voting rights as described in article 5 of our AoA also apply before general meetings of shareholders. The same rules apply to our US transfer agent that operates the US share register for all UBS Group AG shares in a custodian account in the US. In order to determine the voting rights of each shareholder, our share register generally closes two business days before a shareholder meeting. Our independent proxy agent processes voting instructions from shareholders with voting rights as long as technically possible, generally also until two business days before a shareholder meeting. Such technical closure of our share register only facilitates the determination of the actual voting rights of every shareholder that issued a voting instruction. Irrespective of the technical closure, shares that are registered in our share register are never immobilized and are freely tradable at any time – irrespective of any issued voting instructions.

## Board of Directors

The Board of Directors (BoD) of UBS Group AG, under the leadership of the Chairman of the BoD (Chairman), consists of six to 12 members as per our Articles of Association (AoA).

The BoD decides on the strategy of the Group upon recommendation by the Group Chief Executive Officer (Group CEO) and is responsible for the overall direction, supervision and control of the Group and its management, as well as for supervising compliance with applicable laws, rules and regulations. The BoD exercises oversight over UBS Group AG and its subsidiaries and is responsible for establishing a clear Group governance framework to provide effective steering and supervision of the Group, taking into account the material risks to which UBS Group AG and its subsidiaries are exposed. The BoD has ultimate responsibility for the success of the Group and for delivering sustainable shareholder value within a framework of prudent and effective controls. It also approves all financial statements for issue and appoints and removes all Group Executive Board (GEB) members.

The BoD of UBS AG, under the leadership of the Chairman, decides on the strategy of UBS AG upon recommendation by the President of the Executive Board and exercises the ultimate supervision on management. Its ultimate responsibility for the success of UBS AG is exercised subject to the parameters set by the Group.

### Members of the Board of Directors

At the AGM on 4 May 2017, Michel Demaré, David Sidwell, Reto Francioni, Ann F. Godbehere, William G. Parrett, Isabelle Romy, Robert W. Scully, Beatrice Weder di Mauro and Dieter Wemmer were re-elected as members of the BoD, and Julie G. Richardson was elected for her first term. At the same time, Axel A. Weber was re-elected Chairman of the Board of Directors, and Ann F. Godbehere, Michel Demaré, Reto Francioni and William G. Parrett were elected as members of the

Compensation Committee. Additionally, ADB Altorfer Duss & Beilstein AG was elected independent proxy agent. Following their election, the BoD appointed Michel Demaré as Vice Chairman and David Sidwell as Senior Independent Director of UBS Group AG.

On 8 December 2017, the BoD announced that Jeremy Anderson, former Chairman of KPMG's Global Financial Services Practice, would be nominated for election to the UBS Group AG and UBS AG BoD at the forthcoming annual general meetings.

Article 31 of our AoA limits the number of mandates that members of the BoD may hold outside the UBS Group to four board memberships in listed companies and five additional mandates in non-listed companies. Mandates in companies that are controlled by us or that control us are not subject to this limitation. In addition, members of the BoD may hold no more than 10 mandates at UBS's request and 10 mandates in associations, charitable organizations, foundations, trusts, and employee welfare foundations. On 31 December 2017, no member of the BoD reached the thresholds described in article 31 of our AoA.

The following biographies provide information on the BoD members and the Group Company Secretary. In addition to information on mandates, the biographies include information on memberships or other activities or functions, as required by the SIX Swiss Exchange Corporate Governance Directive.

No member of the BoD carries out operational management tasks within UBS and all members of the BoD are therefore non-executive members.

All members of UBS Group AG's BoD are also members of UBS AG's BoD, and committee membership is the same for both entities. The Senior Independent Director function relates only to UBS Group AG.

In 2017, UBS AG's BoD had two committees: the Audit Committee and the Risk Committee.



## Axel A. Weber

German, born 1957

### Functions at UBS Group AG

Chairman of the Board of Directors / Chairperson of the Corporate Culture and Responsibility Committee / Chairperson of the Governance and Nominating Committee

### Professional history and education

Axel A. Weber was elected to the Board of Directors (BoD) of UBS AG at the 2012 AGM and of UBS Group AG in November 2014. He is Chairman of the BoD of both UBS AG and UBS Group AG. He has chaired the Governance and Nominating Committee since 2012 and became Chairperson of the Corporate Culture and Responsibility Committee in 2013. Mr. Weber was president of the German Bundesbank between 2004 and 2011, during which time he also served as a member of the Governing Council of the European Central Bank, a member of the Board of Directors of the Bank for International Settlements, German governor of the International Monetary Fund, and as a member of the G7 and G20 Ministers and Governors. He was a member of the steering committees of the European Systemic Risk Board in 2011 and the Financial Stability Board from 2010 to 2011. From 2002 to 2004, Mr. Weber served as a member of the German Council of Economic Experts. His academic career encompasses professorships in international economics, monetary economics and economic theory at the universities of Cologne, Frankfurt am Main, Bonn and Chicago. Mr. Weber holds a master's degree in economics from the University of Constance and a PhD in economics from the University of Siegen, where he also received his habilitation. He holds honorary doctorates from the universities of Duisburg-Essen and Constance.

### Other activities and functions

- Board member of the Swiss Bankers Association
- Trustees Board member of Avenir Suisse
- Advisory Board member of the "Beirat Zukunft Finanzplatz"
- Board member of the Swiss Finance Council
- Chairman of the Board of the Institute of International Finance
- Board member of the International Monetary Conference
- Member of the European Financial Services Round Table
- Member of the European Banking Group
- Member of the International Advisory Panel, Monetary Authority of Singapore
- Member of the Group of Thirty, Washington, DC
- Chairman of the Board of Trustees of DIW Berlin
- Advisory Board member of the Department of Economics, University of Zurich
- Member of the Trilateral Commission



## Michel Demaré

Swiss and Belgian, born 1956

### Functions at UBS Group AG

Independent Vice Chairman / member of the Audit Committee / member of the Compensation Committee / member of the Governance and Nominating Committee

### Professional history and education

Michel Demaré was elected to the BoD of UBS AG at the 2009 AGM and of UBS Group AG in November 2014. In April 2010, he was appointed independent Vice Chairman for the first time. He has been a member of the Audit Committee since 2009 and the Governance and Nominating Committee since 2010. He became a member of the Compensation Committee in 2013. Mr. Demaré joined ABB in 2005 as Chief Financial Officer (CFO) and as a member of the Group Executive Committee. He stepped down from his function in ABB in January 2013. Between February and August 2008, he acted as the interim CEO of ABB. From September 2008 to March 2011, he combined his role as CFO with that of President of Global Markets. Mr. Demaré joined ABB from Baxter International Inc., where he was CFO Europe from 2002 to 2005. Prior to this, he spent 18 years at the Dow Chemical Company, holding various treasury and risk management positions in Belgium, France, the US and Switzerland. Between 1997 and 2002, Mr. Demaré was CFO of the Global Polyolefins and Elastomers division. He began his career as an officer in the multinational banking division of Continental Illinois National Bank of Chicago, and was based in Antwerp. Mr. Demaré graduated with an MBA from the Katholieke Universiteit Leuven, Belgium, and holds a degree in applied economics from the Université Catholique de Louvain, Belgium.

### Other activities and functions

- Board member of Vodafone Group Plc (as of 1 February 2018)
- Vice Chairman of the Board of Syngenta (until end of December 2017)
- Board member of Louis-Dreyfus Commodities Holdings BV
- Vice Chairman of the Supervisory Board of IMD, Lausanne
- Chairman of the Syngenta Foundation for Sustainable Agriculture (until end of December 2017)
- Advisory Board member of the Department of Banking and Finance, University of Zurich



## David Sidwell

American (US) and British, born 1953

### Functions at UBS Group AG

Senior Independent Director / Chairperson of the Risk Committee / member of the Governance and Nominating Committee

### Professional history and education

David Sidwell was elected to the BoD of UBS AG at the 2008 AGM and of UBS Group AG in November 2014. In April 2010, he was appointed Senior Independent Director for the first time. He has chaired the Risk Committee since 2008 and has been a member of the Governance and Nominating Committee since 2011. Mr. Sidwell was Executive Vice President and CFO of Morgan Stanley between 2004 and 2007. Before joining Morgan Stanley, he worked for JPMorgan Chase & Co., where, in his 20 years of service, he held a number of different positions, including controller and, from 2000 to 2004, CFO of the Investment Bank. Prior to this, he was with Price Waterhouse in both London and New York. Mr. Sidwell graduated from Cambridge University and qualified as a chartered accountant with the Institute of Chartered Accountants in England and Wales.

### Other activities and functions

- Senior advisor at Oliver Wyman, New York
- Board member of Chubb Limited
- Board member of GAVI Alliance
- Chairman of the Board of Village Care, New York



## Reto Francioni

Swiss, born 1955

### Functions at UBS Group AG

Member of the Compensation Committee / member of the Corporate Culture and Responsibility Committee / member of the Risk Committee

### Professional history and education

Reto Francioni was elected to the BoD of UBS AG at the 2013 AGM and of UBS Group AG in November 2014. He has been a member of the Corporate Culture and Responsibility Committee since 2013, the Compensation Committee since 2014 and the Risk Committee since 2015. He was CEO of Deutsche Börse AG from 2005 to 2015. Since 2006, he has been a professor of applied capital markets theory at the University of Basel. From 2002 to 2005, he was Chairman of the Supervisory Board and President of the SWX Group, Zurich. Mr. Francioni was co-CEO and Spokesman for the Board of Directors of Consors AG, Nuremberg, from 2000 to 2002. Between 1993 and 2000, he held various management positions at Deutsche Börse AG, including that of Deputy CEO from 1999 to 2000. From 1992 to 1993, he served in the corporate finance division of Hoffmann-La Roche, Basel. Prior to this, he was on the executive board of Association Tripartite Bourses for several years. From 1985 to 1988, he worked for the former Credit Suisse, holding positions in the equity sales and legal departments. He started his professional career in 1981 in the commerce division of Union Bank of Switzerland. Mr. Francioni completed his studies in law in 1981 and his PhD in 1987 at the University of Zurich.

### Other activities and functions

- Board member of Coca-Cola HBC AG
- Chairman of the Board of Swiss International Air Lines AG
- Board member of Francioni AG
- Board member of MedTech Innovation Partners AG



## Ann F. Godbehere

British and Canadian, born 1955

### Functions at UBS Group AG

Chairperson of the Compensation Committee / member of the Audit Committee

### Professional history and education

Ann F. Godbehere was elected to the BoD of UBS AG at the 2009 AGM and of UBS Group AG in November 2014. She has chaired the Compensation Committee since 2011 and has been a member of the Audit Committee since 2009. Ms. Godbehere was appointed CFO and Executive Director of Northern Rock in February 2008, serving in these roles during the initial phase of the business's public ownership until the end of January 2009. Prior to this role, she served as CFO of Swiss Re Group from 2003 to 2007. Ms. Godbehere was CFO of its Property & Casualty division in Zurich for two years. Prior to this, she served as CFO of the Life & Health division in London for three years. From 1997 to 1998, she was CEO of Swiss Re Life & Health Canada and head of IT for Swiss Re in North America. Between 1996 and 1997, she was CFO of Swiss Re Life & Health North America. Ms. Godbehere is a certified general accountant and was made a fellow of the Chartered Professional Accountant Association in 2014 and fellow of the Certified General Accountant Association of Canada in 2003.

### Other activities and functions

- Board member of Rio Tinto plc (chairman of the audit committee)
- Board member of Rio Tinto Limited (chairman of the audit committee)
- Board member of British American Tobacco plc



## William G. Parrett

American (US), born 1945

### Functions at UBS Group AG

Chairperson of the Audit Committee / member of the Compensation Committee / member of the Corporate Culture and Responsibility Committee

### Professional history and education

William G. Parrett was elected to the BoD of UBS AG at the October 2008 Extraordinary General Meeting and of UBS Group AG in November 2014. He has chaired the Audit Committee since 2009, has been a member of the Corporate Culture and Responsibility Committee since 2012 and the Compensation Committee since 2015. Mr. Parrett served his entire executive career with Deloitte Touche Tohmatsu. He was CEO from 2003 until his retirement in 2007. Between 1999 and 2003, he was a Managing Partner of Deloitte & Touche USA LLP and served on Deloitte's Global Executive Committee between 1999 and 2007. Mr. Parrett founded Deloitte's US National Financial Services Industry Group in 1995 and its Global Financial Services Industry Group in 1997, both of which he led as Chairman. In his 40 years of experience in professional services, Mr. Parrett served public, private, governmental and state-owned clients worldwide. Mr. Parrett has a bachelor's degree in accounting from St. Francis College, New York, and is a certified public accountant (New York).

### Other activities and functions

- Chairman of the Board of UBS Americas Holding LLC (as of 30 January 2018)
- Board member of the Eastman Kodak Company (chairman of the audit and finance committee)
- Board member of the Blackstone Group LP (chairman of the audit committee and chairman of the conflicts committee)
- Board member of Thermo Fisher Scientific Inc. (chairman of the audit committee)
- Chairman of the Board of Conduent Inc.
- Member of the Carnegie Hall Board of Trustees
- Past Chairman of the Board of the United States Council for International Business
- Past Chairman of United Way Worldwide





## Julie G. Richardson

American (US), born 1963

**Function at UBS Group AG**  
Member of the Risk Committee

### Professional history and education

Julie G. Richardson was elected to the BoD of UBS AG and UBS Group AG at the 2017 AGM. She has been a member of the Risk Committee since 2017. Ms. Richardson was a Partner and Head of the New York Office of Providence Equity Partners from 2003 to 2012, a global private equity firm specializing in equity investments in media, communications, education and information companies. She acted as a senior advisor to the partnership until 2014. From 1998 to 2003, Ms. Richardson served as Vice Chairman of JPMorgan Chase & Co.'s Investment Banking division and Head of its Global Telecommunications, Media and Technology group. She started her career with Merrill Lynch in 1986, where she worked until 1998, in her last position as Managing Director Media and Communications Investment Banking. Ms. Richardson graduated with a bachelor's degree in business administration from the University of Wisconsin-Madison.

### Other activities and functions

- Board member of The Hartford Financial Services Group, Inc. (chairman of the audit committee)
- Board member of Yext (chairman of the audit committee)
- Board member of Arconic Inc. (until February 2018)
- Board member of Vereit, Inc. (chairman of the compensation committee)



## Isabelle Romy

Swiss, born 1965

**Functions at UBS Group AG**  
Member of the Audit Committee / member of the Governance and Nominating Committee

### Professional history and education

Isabelle Romy was elected to the BoD of UBS AG at the 2012 AGM and of UBS Group AG in November 2014. She has been a member of the Audit Committee and the Governance and Nominating Committee since 2012. Ms. Romy is a partner at Froriep Legal AG, a large Swiss business law firm. From 1995 to 2012, she worked for another major Swiss law firm based in Zurich, where she was a partner from 2003 to 2012. Her legal practice includes litigation and arbitration in cross-border cases. Ms. Romy has been an associate professor at the University of Fribourg and at the Federal Institute of Technology in Lausanne (EPFL) since 1996. Between 2003 and 2008, she served as a deputy judge at the Swiss Federal Supreme Court. From 1999 to 2006, she was a member of the Ethics Commission at the EPFL. Ms. Romy earned her PhD in law (Dr. iur.) at the University of Lausanne in 1990 and has been a qualified attorney-at-law admitted to the bar since 1991. From 1992 to 1994, she was a visiting scholar at Boalt Hall School of Law, University of California, Berkeley, and completed her professorial thesis at the University of Fribourg in 1996.

### Other activities and functions

- Board member of Froriep Legal AG
- Vice Chairman of the Sanction Commission of SIX Swiss Exchange
- Member of the Fundraising Committee of the Swiss National Committee for UNICEF
- Supervisory Board member of the CAS program Financial Regulation of the University of Bern and University of Geneva



## Robert W. Scully

American (US), born 1950

**Function at UBS Group AG**  
Member of the Risk Committee

### Professional history and education

Robert W. Scully was elected to the BoD of UBS AG and UBS Group AG at the 2016 AGM. He has been a member of the Risk Committee since 2016. Mr. Scully served as a Member of the Office of the Chairman of Morgan Stanley from 2007 to 2009 and was its Co-President responsible for Asset Management, Discover Credit Cards from 2006 to 2007. Prior to assuming the position of Co-President, he was Chairman of Global Capital Markets from 2004 to 2006, Vice Chairman of Investment Banking from 1999 to 2006, and Managing Director from 1996 to 2009. Mr. Scully was Managing Director at Lehman Brothers from 1993 to 1996, having worked for Scully Brothers Foss & Wight from 1989 to 1993 as Managing Director and for Salomon Brothers in Investment Banking and Capital Markets from 1980 to 1989, where he became a Managing Director in 1984. He began his career in the banking industry with Chase Manhattan Bank in 1972 and then worked as an investment banker for Blyth Eastman Dillon & Co. from 1977 to 1980. Mr. Scully graduated in 1972 with a bachelor's degree in psychology from Princeton University and holds an MBA from Harvard University.

### Other activities and functions

- Board member of Chubb Limited
- Board member of Zoetis, Inc.
- Board member of KKR & Co. LP
- Board member of the Dean's Advisors of Harvard Business School



## Beatrice Weder di Mauro

Swiss and Italian, born 1965

### Functions at UBS Group AG

Member of the Audit Committee / member of the Corporate Culture and Responsibility Committee

### Professional history and education

Beatrice Weder di Mauro was elected to the BoD of UBS AG at the 2012 AGM and of UBS Group AG in November 2014. She has been a member of the Audit Committee since 2012 and became a member of the Corporate Culture and Responsibility Committee in 2017. She was member of the Risk Committee from 2013 to May 2017. She has been a professor of economics, economic policy and international macroeconomics at the Johannes Gutenberg University of Mainz since 2001. Currently she is a distinguished fellow at INSEAD in Singapore. Ms. Weder di Mauro has served as non-executive director on the boards of globally leading companies in development finance, pharmaceuticals, technology and insurance. Ms. Weder di Mauro was a member of the German Council of Economic Experts from 2004 to 2012. In 2010, she was a resident scholar at the International Monetary Fund (IMF) in Washington, DC, and, in 2006, a visiting scholar at the National Bureau of Economic Research, Cambridge, MA. She was an associate professor of economics at the University of Basel between 1998 and 2001 and a research fellow at the United Nations University in Tokyo from 1997 to 1998. Prior to this, she was an economist at the IMF in Washington, DC. Ms. Weder di Mauro earned her PhD in economics at the University of Basel in 1993 and received her habilitation there in 1999.

### Other activities and functions

- Supervisory Board member of Robert Bosch GmbH
- Board member of Bombardier Inc.
- Member of the ETH Zurich Foundation Board of Trustees
- Economic Advisory Board member of Fraport AG
- Advisory Board member of Deloitte Germany
- Deputy Chairman of the University Council of the University of Mainz



## Dieter Wemmer

Swiss and German, born 1957

### Function at UBS Group AG

Member of the Risk Committee

### Professional history and education

Dieter Wemmer was elected to the BoD of UBS AG and UBS Group AG at the 2016 AGM. He has been a member of the Risk Committee since 2016. Mr. Wemmer was Chief Financial Officer (CFO) of Allianz SE from 2013 to 2017. He joined Allianz SE in 2012 as a member of the Board of Management, responsible for the insurance business in France, Benelux, Italy, Greece and Turkey and for the Center of Competence "Global Property & Casualty." He was CFO of Zurich Insurance Group (Zurich) from 2007 to 2011. From 2010 to 2011, he was Zurich's Regional Chairman of Europe. Prior to this, Mr. Wemmer was CEO of the Europe General Insurance business and member of Zurich's Group Executive Committee from 2004 to 2007. He held various other management positions in the Zurich Group such as Chief Operating Officer of the Europe General Insurance business from 2003 to 2004, Head of Mergers and Acquisitions from 1999 to 2003 and Head of Financial Controlling from 1997 to 1999. He began his career in the insurance industry within the Zurich Group in 1986 in Cologne after graduating from the University of Cologne with a master's degree and acquiring his doctorate in mathematics in 1985.

### Other activities and functions

- Member of the CFO Forum
- Member of the Systemic Risk Working Group of the ECB and the BIS
- Member of the Berlin Center of Corporate Governance



## Markus Baumann

Swiss, born 1963

### Function at UBS Group AG

Group Company Secretary

### Professional history and education

Markus Baumann was appointed Group Company Secretary of UBS Group AG and Company Secretary of UBS AG by the Board of Directors as of January 2017. He has been with UBS for over 35 years and has held a broad range of leadership roles across the Group in Switzerland, the US and Japan, including Chief of Staff to the Chairman of the Board of Directors since 2015 and Chief Operating Officer of Group Internal Audit from 2006 to 2015. Before this, he worked as Chief Operating Officer EMEA for UBS Asset Management. Earlier in his career, Mr. Baumann worked in Japan for four years as Corporate Planning Officer and assistant to the CEO. He joined UBS in 1979 as a banking apprentice, covering the full range of universal banking activities. Mr. Baumann holds an MBA from INSEAD Fontainebleau and a Swiss Federal Diploma as a Business Analyst.

## Elections and terms of office

Shareholders elect each member of the BoD individually, as well as the Chairman and the members of the Compensation Committee, every year based on proposals from the BoD.

As set out in the Organization Regulations, BoD members are normally expected to serve for a minimum of three years. No BoD member may serve for more than 12 consecutive terms of office. In exceptional circumstances, the BoD may extend this limit. In accordance with the Swiss Code of Best Practice for Corporate Governance, we seek appropriate diversity among the members of the BoD, including gender diversity, as well as appropriate professional backgrounds and experience.

→ Refer to “Skills, expertise and training of the Board of Directors” in this section for more information

## Organizational principles and structure

Following each AGM, the BoD meets to appoint one or more Vice Chairmen, a Senior Independent Director, the BoD committee members other than the Compensation Committee members, who are elected by the shareholders, and their respective Chairpersons. At the same meeting, the BoD appoints a Group Company Secretary, who acts as secretary to the BoD and its committees.

According to the Articles of Association and the Organization Regulations, the BoD meets as often as business requires, but it must meet at least six times a year. During 2017, a total of 23 BoD meetings and calls were held, 14 of which were attended by GEB members. Average participation in BoD meetings and calls was 99%. In addition to the BoD meetings attended by the GEB, the Group CEO partly attended the meetings of the BoD without GEB participation. The average duration of the meetings and calls was 175 minutes. In 2017, the frequency and length of

meetings were the same for UBS Group AG and UBS AG. Additionally, for UBS Group AG six ad hoc meetings and calls were held, two of which were without the GEB.

At every BoD meeting, each committee chairperson provides the BoD with an update on current activities of his or her committee as well as important committee issues.

At least once a year, the BoD reviews its own performance as well as the performance of each of its committees. This review is based on an assessment of the BoD under the auspices of the Governance and Nominating Committee, as well as on a self-assessment of the BoD committees. The last self-assessment determined that the BoD and its committees are functioning effectively and efficiently. The self-assessment of the BoD committees for 2017 will be concluded in spring 2018. At least every three years, the BoD assessments include an appraisal by an external expert. The latest, concerning 2015, was completed in spring 2016 and concluded that the BoD was operating effectively.

The committees listed on the following pages assist the BoD in the performance of its responsibilities. These committees and their charters are described in the Organization Regulations, published at [www.ubs.com/governance](http://www.ubs.com/governance). Each committee meets as often as its business requires, but at least four times a year each for the Audit Committee, the Risk Committee and the Compensation Committee, and twice a year each for the Corporate Culture and Responsibility Committee and the Governance and Nominating Committee. Topics of common interest or affecting more than one committee are discussed at joint committee meetings. The Audit Committee and Risk Committee hold at least four joint meetings a year. The Compensation Committee and Risk Committee periodically hold joint meetings. During 2017, a total of six joint committee meetings were held for UBS Group AG (five joint committee meetings were held for UBS AG).

## Board of Directors

Members on 31 December 2017	Meeting attendance without GEB <sup>2</sup>		Meeting and call attendance with GEB <sup>3</sup>		Key responsibilities include:
Axel A. Weber, Chairman	9/9	100%	14/14	100%	<p>The BoD has ultimate responsibility for the success of the Group and for delivering sustainable shareholder value within a framework of prudent and effective controls. It decides on the Group's strategic aims and the necessary financial and human resources upon recommendation of the Group CEO and sets the Group's values and standards to ensure that its obligations to its shareholders and other stakeholders are met.</p> <p>Refer to the Organization Regulations of UBS Group AG at <a href="http://www.ubs.com/governance">www.ubs.com/governance</a> for more information</p>
Michel Demaré	9/9	100%	14/14	100%	
David Sidwell	9/9	100%	14/14	100%	
Reto Francioni	9/9	100%	14/14	100%	
Ann F. Godbehere	9/9	100%	14/14	100%	
William G. Parrett	9/9	100%	14/14	100%	
Julie G. Richardson <sup>1</sup>	7/7	100%	11/11	100%	
Isabelle Romy	9/9	100%	14/14	100%	
Robert W. Scully	9/9	100%	14/14	100%	
Beatrice Weder di Mauro	9/9	100%	14/14	100%	
Dieter Wemmer	8/9	89%	13/14	93%	

<sup>1</sup> Julie G. Richardson was elected to the BoD at the AGM 2017. <sup>2</sup> Additionally, four unscheduled calls and meetings took place in 2017. <sup>3</sup> Additionally, two unscheduled meetings took place in 2017.

### Audit Committee

The Audit Committee consists of five BoD members as indicated in the table below, all of whom were determined by the BoD to be fully independent. As a group, members of the Audit Committee must have the necessary qualifications and skills to perform all of their duties and together must possess financial literacy and experience in banking and risk management.

The Audit Committee itself does not perform audits but monitors the work of the external auditors, Ernst & Young Ltd (EY), who in turn are responsible for auditing UBS Group AG's and UBS AG's consolidated and standalone annual financial statements and for reviewing the quarterly financial statements.

Together with the external auditors and Group Internal Audit, the Audit Committee in particular reviews the annual financial statements of UBS Group AG and UBS AG as well as the consolidated annual and quarterly financial statements and the consolidated annual report of UBS Group AG and UBS AG, as proposed by management, in order to recommend approval to the BoD or propose any adjustments the Audit Committee considers appropriate.

Periodically, and at least annually, the Audit Committee assesses the qualifications, expertise, effectiveness, independence and performance of the external auditors and their lead audit partner, in order to support the BoD in reaching a decision in relation to the appointment or dismissal of the external auditors and to the rotation of the lead audit partner. The BoD then submits these proposals to the shareholders for approval at the AGM.

During 2017, the Audit Committee held eight committee meetings and 11 calls with an average participation rate of 98%. On average the duration of each of the meetings and calls was approximately 115 minutes. In 2017, for both UBS Group AG and UBS AG, the frequency and length of meetings were the

same. All meetings and calls of the Audit Committee were attended by the Group Chief Financial Officer and the Group Controller and Chief Accounting Officer and some of the meetings were attended by the Group CEO. Occasionally, the committee invited external subject matter experts to present on selected topics. The committee met once with FINMA. In addition, the chair of the committee met once with FINMA and on a periodic basis with the Federal Reserve Bank of New York (FRBNY).

All Audit Committee members have accounting or related financial management expertise and, in compliance with the rules established pursuant to the US Sarbanes-Oxley Act of 2002, at least one member qualifies as a financial expert. The New York Stock Exchange (NYSE) listing standards on corporate governance set more stringent independence requirements for members of audit committees than for the other members of the BoD. Each of the five members of the Audit Committee is an external BoD member who, in addition to satisfying our independence criteria, does not receive, directly or indirectly, any consulting, advisory or compensatory fees from UBS Group AG other than in his or her capacity as a BoD member, does not hold, directly or indirectly, UBS Group AG shares in excess of 5% of the outstanding capital and (except as noted below) does not serve on the audit committees of more than two other public companies. The NYSE listing standards on corporate governance allow for an exemption for audit committee members to serve on more than three audit committees of public companies, provided that all BoD members determine that such simultaneous service does not impair the member's ability to effectively serve on each committee and to fulfill his or her obligations. Considering the credentials of William G. Parrett, the BoD has granted him such an exemption.

### Audit Committee

Members on 31 December 2017	Meeting and call attendance		Key responsibilities include:
William G. Parrett (chair)	19/19	100%	The function of the Audit Committee is to serve as an independent and objective body with oversight of: (i) UBS Group AG's and the Group's accounting policies, financial reporting and disclosure controls and procedures; (ii) the quality, adequacy and scope of external audit; (iii) UBS Group AG's and the Group's compliance with financial reporting requirements; (iv) the executives' approach to internal controls with respect to the production and integrity of the financial statements and disclosure of the financial performance; and (v) the performance of Group Internal Audit in conjunction with the Chairman. The executives are responsible for the preparation, presentation and integrity of the financial statements. External auditors are responsible for auditing UBS Group AG's and the Group's annual financial statements and for reviewing the quarterly financial statements.
Michel Demaré	18/19	95%	
Ann F. Godbehere	19/19	100%	
Isabelle Romy	18/19	95%	
Beatrice Weder di Mauro	17/19	89%	

Refer to the Organization Regulations of UBS Group AG at [www.ubs.com/governance](http://www.ubs.com/governance) for more information

### Compensation Committee

The Compensation Committee consists of four independent BoD members as indicated in the table below. In addition to the key responsibilities indicated in the same table, the Compensation Committee reviews the compensation disclosures included in this report.

During 2017, the Compensation Committee held seven meetings and two calls with a participation rate of 100%. On average the duration of each of the meetings and calls was approximately 100 minutes. The meetings were held in the presence of the Chairman, the Group CEO and generally external advisors. The chair of the committee met with regulators as appropriate.

→ Refer to “Our compensation governance framework” and “Total Reward Principles” in the “Compensation” section from pages 282 and 264, respectively, of this report for more information on the Compensation Committee’s decision-making procedures

### Corporate Culture and Responsibility Committee

As of 31 December 2017, the Corporate Culture and Responsibility Committee consisted of the Chairman and three independent BoD members as listed in the table. The Group CEO and the Head UBS and Society are permanent guests of the Corporate Culture and Responsibility Committee, while senior regional representatives (chairmen or Presidents) attend two of the meetings as guests. During 2017, six meetings were held with a participation rate of 100%. On average the duration of each of the meetings was approximately 70 minutes.

→ Refer to the “UBS and Society” section from page 242 of this report for more information

### Compensation Committee

Members on 31 December 2017	Meeting and call attendance		Key responsibilities include:
Ann F. Godbehere (chair)	9/9	100%	The Compensation Committee is responsible for: <ul style="list-style-type: none"> <li>(i) supporting the BoD in its duties to set guidelines on compensation and benefits,</li> <li>(ii) approving the total compensation for the Chairman and the non-independent BoD members,</li> <li>(iii) establishing, together with the Chairman, financial and non-financial performance targets for the Group CEO and reviewing, upon the recommendation from the Group CEO, financial and non-financial performance targets for the other GEB members,</li> <li>(iv) evaluating, in consultation with the Chairman, the performance of the Group CEO in meeting agreed targets, as well as informing the BoD of the individual performance assessments of the GEB members,</li> <li>(v) proposing, together with the Chairman, total individual compensation for the independent BoD members and Group CEO for approval by the BoD and</li> <li>(vi) proposing to the BoD for approval, upon recommendation from the Group CEO, the total individual compensation for GEB members.</li> </ul>
Michel Demaré	9/9	100%	
Reto Francioni	9/9	100%	
William G. Parrett	9/9	100%	

Refer to the Organization Regulations of UBS Group AG at [www.ubs.com/governance](http://www.ubs.com/governance) for more information

### Corporate Culture and Responsibility Committee

Members on 31 December 2017	Meeting attendance		Key responsibilities include:
Axel A. Weber (chair)	6/6	100%	The Corporate Culture and Responsibility Committee supports the BoD in its duties to safeguard and advance the Group’s reputation for responsible and sustainable conduct. Its function is forward-looking in that it monitors and reviews societal trends and transformational developments and assesses their potential relevance for the Group. In undertaking this assessment, it reviews stakeholder concerns and expectations pertaining to the societal performance of UBS and to the development of its corporate culture. The Corporate Culture and Responsibility Committee’s function also encompasses the monitoring of the current state and implementation of the programs and initiatives within the Group pertaining to corporate culture and corporate responsibility.
Reto Francioni	6/6	100%	
William G. Parrett	6/6	100%	
Beatrice Weder di Mauro <sup>1</sup>	4/4	100%	

Refer to the Organization Regulations of UBS Group AG at [www.ubs.com/governance](http://www.ubs.com/governance) for more information

<sup>1</sup> Following the AGM in May, Beatrice Weder di Mauro became a member of the Corporate Culture and Responsibility Committee and was no longer a member of the Risk Committee.

### Governance and Nominating Committee

As of 31 December 2017, the Governance and Nominating Committee consisted of the Chairman and three independent members as listed in the table. During 2017, seven meetings and one call were held with a participation rate of 100%. On average the duration of each of the meetings and the call was approximately 50 minutes. All meetings of the Governance and Nominating Committee were attended by the Group CEO.

### Risk Committee

As of 31 December 2017, the Risk Committee comprised five independent BoD members as listed in the table. During 2017, the Risk Committee held nine committee meetings and three calls with a participation rate of 100%. On average the duration of each of the meetings and calls was approximately 225 minutes. In 2017, the frequency and length of meetings were the same for both UBS Group AG and UBS AG. Usually, the Group CEO, the Group CFO, the Group CRO and the Group General Counsel attend the meetings and calls. Occasionally, the committee invited external subject matter experts to present on selected topics. The committee met once with the FRBNY and once with FINMA. The chair met once each with the FCA, the PRA, FINMA and the FRBNY.

### Special Committee

The Special Committee is an ad hoc committee with a standing composition and is called and held on an ad hoc basis.

The Special Committee is composed of four independent BoD members and focuses on internal and regulatory investigations. Usually, the Group CEO and the Group General Counsel attend the meetings. Occasionally, the committee invited external legal counsel to present on selected topics. As of 31 December 2017, David Sidwell chaired the Special Committee with Michel Demaré, William G. Parrett and Isabelle Romy as additional members. During 2017, two committee meetings were held with an average participation rate of 88%. On average the duration of each of the meetings was 60 minutes. In 2017, the frequency and length of meetings were the same for both UBS Group AG and UBS AG.

## Governance and Nominating Committee

Members on 31 December 2017	Meeting and call attendance		Key responsibilities include:
Axel A. Weber (chair)	8/8	100%	<p>The function of the Governance and Nominating Committee is to support the BoD in fulfilling its duty to establish best practices in corporate governance across the Group, to conduct a BoD assessment (self- or external assessment), to establish and maintain a process for appointing new BoD members and GEB members (in the latter case, upon proposal of the Group CEO) and to manage the succession planning of all GEB members.</p> <p>Refer to the Organization Regulations of UBS Group AG at <a href="http://www.ubs.com/governance">www.ubs.com/governance</a> for more information</p>
Michel Demaré	8/8	100%	
Isabelle Romy	8/8	100%	
David Sidwell	8/8	100%	

## Risk Committee

Members on 31 December 2017	Meeting and call attendance		Key responsibilities include:
David Sidwell (chair)	12/12	100%	<p>The function of the Risk Committee is to oversee and support the BoD in fulfilling its duty to supervise and set an appropriate risk management and control framework in the areas of:</p> <ul style="list-style-type: none"> <li>(i) risk management and control, including credit, market, country, legal, compliance, operational and conduct risks;</li> <li>(ii) treasury and capital management, including funding, liquidity and equity attribution; and</li> <li>(iii) balance sheet management.</li> </ul> <p>The Risk Committee considers the potential effects of the aforementioned risks on the Group's reputation. For these purposes, the Risk Committee will receive all relevant information from the GEB and has the authority to meet with regulators / third parties in consultation with the Group CEO.</p> <p>Refer to the Organization Regulations of UBS Group AG at <a href="http://www.ubs.com/governance">www.ubs.com/governance</a> for more information</p>
Reto Francioni	12/12	100%	
Julie G. Richardson <sup>1</sup>	9/9	100%	
Robert W. Scully	12/12	100%	
Beatrice Weder di Mauro <sup>2</sup>	3/3	100%	
Dieter Wemmer	12/12	100%	

<sup>1</sup> Julie G. Richardson was elected to the BoD at the AGM 2017. <sup>2</sup> Following the 2017 AGM in May, Beatrice Weder di Mauro became a member of the Corporate Culture and Responsibility Committee and was no longer a member of the Risk Committee.

## Roles and responsibilities of the Chairman of the Board of Directors

Axel A. Weber serves as a full-time Chairman of the BoD, in line with his employment contract.

The Chairman coordinates tasks within the BoD, calls BoD meetings and sets their agendas. He presides over all general meetings of shareholders and works with the committee chairpersons to coordinate the work of all BoD committees. Together with the Group CEO, the Chairman is responsible for effective communication with shareholders and other stakeholders, including government officials, regulators and public organizations. This is in addition to establishing and maintaining a close working relationship with the Group CEO and other GEB members, and providing advice and support when appropriate, including continuing to support the firm's cultural change as a key priority on the basis of our Pillars, Principles and Behaviors.

→ Refer to the "Our employees" section from page 256 of this report for more information on our Pillars, Principles and Behaviors

In 2017, the Chairman met on a regular basis with core supervisory authorities, including FINMA and the Swiss National Bank, in Switzerland, the FRBNY and the Office of the Comptroller of the Currency in the US, and the PRA and the FCA in the UK. Meetings with other important supervisory authorities, in regions such as Asia Pacific, EMEA and the US, were scheduled on an ad hoc or needs-driven basis.

## Roles and responsibilities of the Vice Chairmen and the Senior Independent Director

The BoD appoints one or more Vice Chairmen and a Senior Independent Director. If the BoD appoints more than one Vice Chairman, one of them must be independent. Both the Vice Chairman and the Senior Independent Director support the Chairman with his responsibilities and authorities and provide him advice. They facilitate Group-wide, in conjunction with the Chairman and the Governance and Nominating Committee, good corporate governance, balanced leadership and control within the Group, the Board and the committees. Michel Demaré has been appointed as Vice Chairman, and David Sidwell has been appointed as Senior Independent Director. The Vice Chairman is required to lead and has led meetings of the BoD in the temporary absence of the Chairman. Together with the Governance and Nominating Committee, he is tasked with the ongoing monitoring and the annual evaluation of the Chairman. Furthermore, he

represents UBS on behalf of the Chairman in meetings with internal or external stakeholders. The Senior Independent Director enables and supports communication and the flow of information among the independent BoD members. At least twice a year, he organizes and leads a meeting of the independent BoD members without the participation of the Chairman. In 2017, two independent BoD meetings were held for UBS Group AG and UBS AG with a participation of 100% and an average duration of approximately 140 minutes. The Senior Independent Director also relays to the Chairman any issues or concerns raised by the independent BoD members and acts as a point of contact for shareholders and stakeholders seeking discussions with an independent BoD member.

## Important business connections of independent members of the Board of Directors

As a global financial services provider and a major Swiss bank, we enter into business relationships with many large companies, including some in which our BoD members assume management or independent board responsibilities. The Governance and Nominating Committee determines in each instance whether the nature of the Group's business relationship with such a company might compromise our BoD members' capacity to express independent judgment.

Our Organization Regulations require three-quarters of the UBS Group AG BoD members and one-third at UBS AG to be independent. For this purpose, independence is determined in accordance with the FINMA Circular 2017 / 1 "Corporate governance – banks," the New York Stock Exchange rules, and the rules and regulations of other securities exchanges on which the UBS Group AG shares are listed, if any, applying the strictest standard.

In 2017, our BoD met the standards of the Organization Regulations for the percentage of directors that are considered independent under the criteria described above. Due to our Chairman's full-time employment by UBS Group AG, he is not considered independent. No other BoD member has a significant business connection to UBS or any of its subsidiaries.

All relationships and transactions with UBS Group AG's independent BoD members are conducted in the ordinary course of business and are on the same terms as those prevailing at the time for comparable transactions with non-affiliated persons. All relationships and transactions with BoD members' associated companies are conducted at arm's length.

→ Refer to "Note 32 Related parties" in the "Consolidated financial statements" section from page 452 of this report for more information

### Checks and balances: Board of Directors and Group Executive Board

We operate under a strict dual board structure, as mandated by Swiss banking law. The separation of responsibilities between the BoD and the GEB is clearly defined in the Organization Regulations. The BoD decides on the strategy of the Group upon recommendations by the Group CEO and exercises ultimate supervision over management, whereas the GEB, headed by the Group CEO, has executive management responsibility. The functions of Chairman of the BoD and Group CEO are assigned to two different people, leading to a separation of power. This structure establishes checks and balances and preserves the institutional independence of the BoD from the day-to-day management of the Group, for which responsibility is delegated to the GEB under the leadership of the Group CEO. No member of one board may simultaneously be a member of the other.

Supervision and control of the GEB remain with the BoD. The authorities and responsibilities of the two bodies are governed by the Articles of Association and the Organization Regulations, including the latter document’s “Annex B – Key approval authorities.”

### Skills, expertise and training of the Board of Directors

The BoD is composed of members with a broad spectrum of skills, educational backgrounds, experience and expertise from a range of sectors that reflect the nature and scope of the firm’s business. With a view to recruiting needs, the Governance and Nominating Committee uses a skills / experience matrix as a tool to identify any gaps in the competencies considered most relevant to the BoD, taking into consideration the bank’s business exposure, risk profile, strategy and geographic reach.

We asked our Board members to rate their four strongest competencies out of the following 12 categories:

- banking (wealth management, asset management, personal and corporate banking)
- investment banking, capital markets
- insurance
- finance, audit, accounting

- risk management
- human resources management, including compensation
- legal, compliance
- technology, cyber security
- regulatory experience, central bank
- corporate responsibility and sustainability
- experience as chief executive officer or chairman
- executive board leadership experience (e.g., as chief financial officer, chief risk officer or chief operating officer)

The Governance and Nominating Committee reviews these categories and ratings annually to confirm that the BoD continues to possess the most relevant experience and competencies to perform BoD duties.

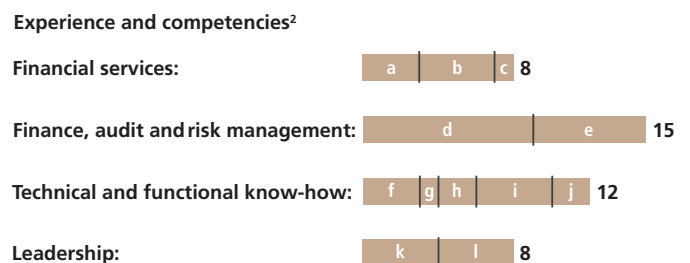
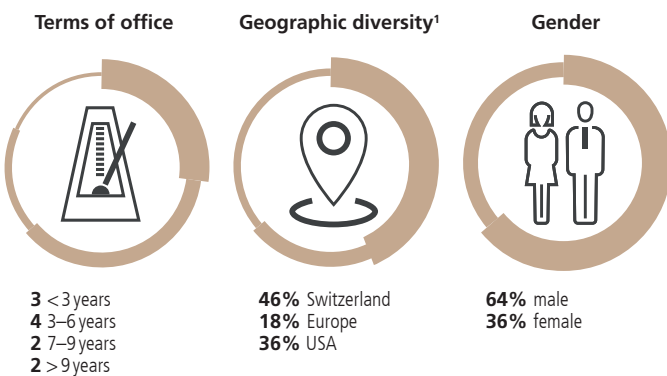
For 2017, competencies in all 12 categories were represented in our BoD. Particularly strong levels of experience and expertise existed in the areas of:

- finance, audit, accounting
- risk management
- financial services

Furthermore, 8 of the 11 BoD members have held or currently hold chairman, CEO or other executive board-level leadership positions.

Moreover, education remained an important priority for our BoD members. In addition to a comprehensive induction program for new BoD members, continuous training and topical deep dives are part of the BoD agenda.

→ Refer to “Risk governance” in the “Risk management and control” section from page 117 of this report for information on our risk governance framework



- a) banking (personal and corporate, wealth and asset management) –
- b) investment banking, capital markets – c) insurance – d) finance, audit, accounting –
- e) risk management – f) HR management – g) legal, compliance – h) technology, cyber security –
- i) regulatory experience, central bank – j) corporate responsibility and sustainability –
- k) CEO/chairman – l) executive board leadership (e.g., CFO, CRO or COO)

<sup>1</sup> In the case of two nationalities the domicile is counted. <sup>2</sup> The bars represent the main strengths of the BoD, up to a maximum of four competencies per member.



## Information and control instruments vis-à-vis the Group Executive Board

The BoD is kept informed of the activities of the GEB in various ways, including minutes of GEB meetings, which are made available to the BoD. The Group CEO and other GEB members also regularly update the BoD on important issues at BoD meetings. The BoD receives a monthly performance update. This report highlights and discusses financial results, capital, funding, liquidity, risk, regulatory and legal developments, as well as performance against plan and forecasts for the remainder of the year.

At BoD meetings, BoD members may request from BoD or GEB members any information about matters concerning the Group that they require to fulfill their duties. Outside meetings, BoD members may request information from other BoD and GEB members. Such requests must be addressed – routed through the Group Company Secretary – to the Chairman.

The BoD is supported in discharging its governance responsibilities by our internal audit function, which, among other things, assesses the reliability of financial and operational information and the effectiveness of processes for compliance with legal, regulatory and statutory requirements.

The Head of Group Internal Audit (GIA) reports directly to the Chairman. In addition, the internal audit organization has a

functional reporting line to the Audit Committee in line with its responsibilities as set forth in our Organization Regulations. The Audit Committee annually assesses and approves the appropriateness of GIA's annual audit plan and annual audit objectives, and monitors GIA's discharge of its annual audit objectives, including being informed of the results of the annual audit plan and the status of the annual audit objectives. The Audit Committee is in regular contact with the Head of GIA. GIA issues quarterly reports that provide a broad overview of significant audit results and key issues, control themes and trends based on individual audit results, continuous risk assessment and issue assurance results. The reports are provided to the Chairman of the BoD, members of the Audit and the Risk Committees, the GEB and other stakeholders. Further, GIA issues an annual activity report providing an assessment of its activities, processes, audit plan and resourcing requirements and other important developments affecting GIA. The activity report is provided to the Chairman of the BoD and to the Audit Committee, and is an element for their assessment of GIA's effectiveness.

- **Refer to "Group Internal Audit" in this section for more information**
- **Refer to "Internal risk reporting" in the "Risk management and control" section on page 122 of this report for information on reporting to the BoD**

## Group Executive Board

The Board of Directors (BoD) delegates the management of the business to the Group Executive Board (GEB).

### Responsibilities, authorities and organizational principles of the Group Executive Board

Under the leadership of the Group CEO, the GEB has executive management responsibility for the steering of the Group and its business. It assumes overall responsibility for developing the Group and business division strategies and the implementation of approved strategies. The GEB constitutes itself as the risk council of the Group. In this function, the GEB has overall responsibility for establishing and supervising the implementation of risk management and control principles, as well as for managing the risk profile of the Group as a whole, as determined by the BoD and the Risk Committee. In 2017, the GEB held 17 meetings and two GEB offsite meetings. In 2017, the frequency of meetings for both UBS Group AG and UBS AG was the same.

→ Refer to the Organization Regulations of UBS Group AG at [www.ubs.com/governance](http://www.ubs.com/governance) for more information on the authorities of the Group Executive Board

### Responsibilities and authorities of the Group Asset and Liability Management Committee

The Group Asset and Liability Management Committee (Group ALCO), established by the GEB, is responsible for supporting the GEB in its responsibility to promote the usage of the Group's assets and liabilities in line with the Group's strategy, regulatory commitments and the interests of shareholders and other stakeholders. Group ALCO proposes the framework for capital management, capital allocation, funding and liquidity risk and proposes limits and targets for the Group to the BoD for approval. It oversees the balance sheet management of the Group, its business divisions and Corporate Center. The Organization Regulations additionally specify which powers of the GEB are delegated to the Group ALCO. In 2017, the Group ALCO held 10 meetings for UBS Group AG and UBS AG.

### Management contracts

We have not entered into management contracts with any companies or natural persons that do not belong to the Group.

### Members of the Group Executive Board

On 14 December 2017, we announced the following changes to the GEB. Martin Blessing was appointed President Wealth Management, Axel P. Lehmann as President Personal & Corporate Banking and President UBS Switzerland and Sabine Keller-Busse as Group Chief Operating Officer. The Group Chief Operating Officer area was expanded to include the Group Human Resources function. Jürg Zeltner stepped down from the GEB at year-end. The changes were made effective on 1 January 2018.

On 22 January 2018, we announced the creation of a unified Global Wealth Management division. Martin Blessing, President Wealth Management, and Tom Naratil, President UBS Americas and Wealth Management Americas, were appointed co-Presidents of Global Wealth Management as of 1 February 2018.

The biographies on the following pages provide information about the GEB members in office on 31 December 2017. In addition to information on mandates, the biographies include memberships and other activities or functions, as required by the SIX Swiss Exchange Corporate Governance Directive.

In line with Swiss law, article 36 of UBS Group AG's Articles of Association (AoA) limits the number of mandates that members of the GEB may hold outside the UBS Group to one board membership in a listed company and five additional mandates in non-listed companies. Mandates in companies that are controlled by UBS or that control UBS are not subject to this limitation. In addition, GEB members may not hold more than 10 mandates at a time at the request of the company and eight mandates in associations, charitable organizations, foundations, trusts and employee welfare foundations. On 31 December 2017, no member of the GEB reached the aforementioned thresholds.

At UBS AG, management of the business is also delegated, and the Executive Board, under the leadership of its President, has executive management responsibility for UBS AG and its business. All members of the GEB are also members of UBS AG's Executive Board, with the exception of Mr. Lehmann. Similar to the Group ALCO, UBS AG's Asset and Liability Management Committee is responsible for promoting the usage of UBS AG's financial resources in line with UBS AG's and the Group's strategy and regulatory requirements.

Currently, no specific diversity policy is required, or applied, with respect to the composition of the GEB and UBS AG's Executive Board.



## Sergio P. Ermotti

Swiss, born 1960

**Function at UBS Group AG**  
Group Chief Executive Officer

### Professional history and education

Sergio P. Ermotti has been Group Chief Executive Officer of UBS Group AG since November 2014, having held the same position at UBS AG since November 2011 and on an interim basis between September and November 2011. Mr. Ermotti became a member of the GEB in April 2011 and was Chairman and CEO of UBS Group Europe, Middle East and Africa from April to November 2011. From 2007 to 2010, he was Group Deputy Chief Executive Officer at UniCredit, Milan, and was responsible for the strategic business areas of Corporate and Investment Banking, and Private Banking. He joined UniCredit in 2005 as Head of Markets & Investment Banking Division. Between 2001 and 2003, he worked at Merrill Lynch, serving as co-Head of Global Equity Markets and as a member of the Executive Management Committee for Global Markets & Investment Banking. He began his career with Merrill Lynch in 1987 and held various positions within equity derivatives and capital markets. Mr. Ermotti is a Swiss-certified banking expert and is a graduate of the Advanced Management Programme at Oxford University.

### Other activities and functions

- Board member of UBS Switzerland AG
- Chairman of the Board of Directors of UBS Business Solutions AG
- Chairman of the UBS Optimus Foundation Board
- Chairman of the Fondazione Ermotti, Lugano
- Chairman and President of the Board of the Swiss-American Chamber of Commerce
- Board member of the Fondazione Lugano per il Polo Culturale, Lugano
- Board member of the Global Apprenticeship Network
- Member of the Institut International d'Etudes Bancaires
- Member of the Saïd Business School Global Leadership Council, University of Oxford



## Martin Blessing

German, born 1963

**Function at UBS Group AG**  
President Personal & Corporate Banking and President UBS Switzerland until 31 December 2017, as of 1 January 2018 President Wealth Management and as of 1 February 2018 co-President Global Wealth Management

### Professional history and education

Martin Blessing was appointed co-President of Global Wealth Management of UBS Group AG and UBS AG as of February 2018. Prior to this, he was President Wealth Management effective January 2018. He held the positions of President Personal & Corporate Banking of UBS Group AG and President UBS Switzerland as well as President of the Executive Board of UBS Switzerland AG from September 2016 to December 2017. He became a member of the GEB in September 2016. Before joining UBS, he worked for 15 years for Commerzbank AG, from 2008 to April 2016 as Chief Executive Officer. Before, he held various senior management positions; from 2004 to 2008, he was Head of Corporate Banking and from 2006 onward also responsible for IT & Operations. From 2001 to 2004, he was Head of Private Clients. Before joining Commerzbank, from 2000 to 2001 he was Chief Executive Officer of Advance Bank, a subsidiary of Dresdner Bank AG. From 1997 to 2000, he acted as Dresdner Bank's joint Head Private Clients. From 1989 to 1996, he worked for McKinsey & Company, the last two years as Partner. Martin Blessing holds an MBA from the University of Chicago and in 1987 graduated from the University of St. Gallen with a degree in business administration.

### Other activities and functions

- Executive Board member of Baden-Baden Entrepreneur Talks



## Christian Bluhm

German, born 1969

**Function at UBS Group AG**  
Group Chief Risk Officer

### Professional history and education

Christian Bluhm became a member of the GEB and was appointed Group Chief Risk Officer of UBS Group AG and UBS AG in January 2016. He joined UBS from FMS Wertmanagement, where he had been Chief Risk & Financial Officer since 2010 and Spokesman of the Executive Board from 2012 to 2015. From 2004 to 2009, he worked for Credit Suisse, where he was Managing Director responsible for Credit Risk Management in Switzerland and Private Banking worldwide. Mr. Bluhm was Head of Credit Portfolio Management until 2008 and then Head of Credit Risk Management Analytics & Instruments after the financial crisis in 2008. From 2001 to 2004, he worked for Hypovereinsbank in Munich in Group Credit Portfolio Management, heading a team that specialized in Structured Finance Analytics. Before starting his banking career with Deutsche Bank in Credit Risk Management in 1999, he worked as a postdoctoral fellow at Cornell University in Ithaca and as a scientific assistant at the University of Greifswald. Mr. Bluhm holds a degree in mathematics and informatics from the University of Erlangen-Nuremberg and received his PhD in mathematics in 1996 from the same university.

### Other activities and functions

- Board member of UBS Business Solutions AG
- Board member of UBS Switzerland AG



## Markus U. Diethelm

Swiss, born 1957

**Function at UBS Group AG**  
Group General Counsel

### Professional history and education

Markus U. Diethelm has been Group General Counsel of UBS Group AG since November 2014, having held the same position at UBS AG since September 2008, when he became a member of the GEB. He was Executive Board member of UBS Business Solutions AG from 2015 to 2016. From 1998 to 2008, he served as Group Chief Legal Officer at Swiss Re, and he was appointed to the company's Group Executive Board in 2007. Prior to this, he was with Los Angeles-based law firm Gibson, Dunn & Crutcher and focused on corporate matters, securities transactions, litigation and regulatory investigations while working out of the firm's Brussels and Paris offices. From 1989 to 1992, he practiced at Shearman & Sterling in New York, specializing in mergers and acquisitions. In 1988, he worked at Paul, Weiss, Rifkind, Wharton & Garrison in New York. After starting his career in 1983 with Bär & Karrer, he served as a law clerk at the District Court of Uster in Switzerland from 1984 to 1985. Mr. Diethelm holds a law degree from the University of Zurich and a master's degree and a PhD from Stanford Law School. Mr. Diethelm is a qualified attorney-at-law admitted to the bar in Zurich, Geneva and in New York State.

### Other activities and functions

- Board member of UBS Business Solutions AG
- Chairman of the Swiss-American Chamber of Commerce's legal committee
- Chairman of the Swiss Advisory Council of the American Swiss Foundation
- Member of the Foundation Council of the UBS International Center of Economics in Society
- Member of the Professional Ethics Commission of the Association of Swiss Corporate Lawyers
- Member of the Supervisory Board of the Fonds de Dotation LUMA / Arles



## Kirt Gardner

American (US), born 1959

**Function at UBS Group AG**  
Group Chief Financial Officer

### Professional history and education

Kirt Gardner became a member of the GEB and was appointed Group Chief Financial Officer of UBS Group AG and UBS AG in January 2016. He was CFO Wealth Management from 2013 to 2015. Prior to this, he held a number of leadership positions at Citigroup, including CFO and Head of Strategy within Global Transaction Services from 2010 to 2013, Head of Strategy, Planning and Risk Strategy for the Corporate and Institutional Division from 2006 to 2010 and Head of Global Strategy and Cost Management for the Consumer Bank from 2004 to 2006. Prior to this, he held the position of Global Head of Financial Services Strategy for BearingPoint, for which he worked in Asia and New York for four years. From 1994 to 2000, he was Managing Director with Barents Group, working in the US, Asia, Latin America and Europe. Mr. Gardner holds a bachelor's degree in economics from Williams College, a master's degree from the University of Pennsylvania and an MBA in finance from Wharton School.

### Other activities and functions

- Board member of UBS Business Solutions AG



## Sabine Keller-Busse

Swiss and German, born 1965

**Function at UBS Group AG**  
Group Head Human Resources until 31 December 2017,  
Group Chief Operating Officer as of 1 January 2018

### Professional history and education

Sabine Keller-Busse was appointed Group Chief Operating Officer of UBS Group AG and UBS AG and President of the Executive Board of UBS Business Solutions AG as of January 2018. Ms. Keller-Busse was Group Head Human Resources from August 2014 to December 2017. She became a member of the GEB in January 2016. Having joined UBS in 2010, she served as Chief Operating Officer UBS Switzerland until 2014. Prior to this, she led Credit Suisse's Private Clients Region Zurich division for two years. From 1995 to 2008, Ms. Keller-Busse worked for McKinsey & Company, where she had been Partner since 2001. Ms. Keller-Busse holds a master's degree in business administration from the University of St. Gallen and received a PhD in business administration from the same university.

### Other activities and functions

- Vice-Chairman of the Board of Directors of SIX Group (Chairman of the nomination & compensation committee)
- Foundation Board member of the UBS Pension Fund
- Foundation Board member of the University Hospital Zurich



## Ulrich Körner

Swiss and German, born 1962

### Functions at UBS Group AG

President Asset Management and President UBS Europe, Middle East and Africa

### Professional history and education

Ulrich Körner has been President Asset Management of UBS Group AG (formerly CEO Global Asset Management) since November 2014, having held the same position at UBS AG since January 2014. He became a member of the GEB in April 2009 and was Group Chief Operating Officer from 2009 to 2013. In addition, he was appointed President UBS Europe, Middle East and Africa (formerly CEO of UBS Group Europe, Middle East and Africa) in December 2011. In 1998, Mr. Körner joined Credit Suisse. He served as a member of the Credit Suisse Group Executive Board from 2003 to 2008, holding various management positions, including CFO and Chief Operating Officer. From 2006 to 2008, he was responsible for the entire Swiss client business as CEO Credit Suisse Switzerland. Mr. Körner received a PhD in business administration from the University of St. Gallen and served for several years as an auditor at Price Waterhouse and as a management consultant at McKinsey & Company.

### Other activities and functions

- Member of the Supervisory Board of UBS Europe SE
- Chairman of the Foundation Board of the UBS Pension Fund
- Chairman of the Widder Hotel AG, Zurich
- Member of the UBS Optimus Foundation Board
- Vice President of the Board of Lyceum Alpinum Zuoz
- Member of the Financial Service Chapter Board of the Swiss-American Chamber of Commerce
- Advisory Board member of the Department of Banking and Finance at the University of Zurich
- Member of the business advisory council of the Laureus Foundation Switzerland



## Axel P. Lehmann

Swiss, born 1959

### Functions at UBS Group AG

Group Chief Operating Officer until 31 December 2017, as of 1 January 2018 President Personal & Corporate Banking and President UBS Switzerland

### Professional history and education

Axel P. Lehmann was appointed President Personal & Corporate Banking of UBS Group AG and President UBS Switzerland as of January 2018, in addition to taking over as President of the Executive Board of UBS Switzerland AG. He became a member of the GEB and was appointed Group Chief Operating Officer of UBS Group AG and UBS AG in January 2016. He was a member of the BoD of UBS AG from 2009 to 2015 and of UBS Group AG from 2014 to 2015 and was a member of both the Risk Committee and the Governance and Nominating Committee. Mr. Lehmann became a member of Zurich Insurance Group's (Zurich) Group Executive Committee in 2002, holding various management positions, including CEO for the European and North America businesses. From 2008 to 2015, he was Chief Risk Officer with additional responsibilities for Group IT, Regional Chairman for Europe, Middle East and Africa as well as Chairman for Farmers Group Inc. In 2001, he was appointed CEO for Northern, Central and Eastern Europe and Zurich Group Germany, having served as a member of the company's Group Management Board since 2000 with responsibility for group-wide business development functions. In 1996, he joined Zurich as a member of the Executive Committee Switzerland, and previously, he was head of corporate planning and controlling at SwissLife, Vice President of the Institute of Insurance Economics and a visiting professor at Bocconi University in Milan. Mr. Lehmann holds a PhD and a master's degree in business administration and economics from the University of St. Gallen. He is also a graduate of the Advanced Management Program of the Wharton School.

### Other activities and functions

- Board member of UBS Business Solutions AG
- Co-Chair of the Global Future Council of the Future of Financial and Monetary Systems of WEF
- Adjunct professor and Chairman of the Board of the Institute of Insurance Economics at the University of St. Gallen
- Member of the HSG Advisory Board of the University of St. Gallen
- Member of the Swiss-American Chamber of Commerce Chapter Doing Business in USA



## Tom Naratil

American (US), born 1961

### Functions at UBS Group AG

President Wealth Management Americas and President UBS Americas until 31 January 2018 and as of 1 February 2018 co-President Global Wealth Management and President UBS Americas

### Professional history and education

Tom Naratil became co-President of Global Wealth Management of UBS Group AG and UBS AG in February 2018. In January 2018, he became CEO of UBS Americas Holding LLC. He was appointed President UBS Americas of UBS Group AG and UBS AG in January 2016. He previously served as President Wealth Management Americas from 2016 to 2018. He became a member of the GEB in June 2011 and was Group CFO of UBS AG from 2011 to 2015. He held the same position for UBS Group AG from 2014 to 2015. In addition to the role of Group CFO, he was Group Chief Operating Officer from 2014 to 2015. He was President of the Executive Board of UBS Business Solutions AG from 2015 to March 2016. He served as CFO and Chief Risk Officer of Wealth Management Americas from 2009 until his appointment as Group CFO in 2011. Before 2009, he held various senior management positions within UBS, including heading the Auction Rate Securities Solutions Group during the financial crisis in 2008. He was named Global Head of Marketing, Segment & Client Development in 2007, Global Head of Market Strategy & Development in 2005, and Director of Banking and Transactional Solutions, Wealth Management USA, in 2002. During this time, he was a member of the Group Managing Board. He joined Paine Webber Incorporated in 1983 and after the merger with UBS became Director of the Investment Products Group. Mr. Naratil holds an MBA in economics from New York University and a Bachelor of Arts in history from Yale University.

### Other activities and functions

- Board member of UBS Americas Holding LLC
- Board member of the American Swiss Foundation
- Board member of the Clearing House Supervisory Board
- Member of the Board of Consultants for the College of Nursing at Villanova University



## Andrea Orcel

Italian, born 1963

**Function at UBS Group AG**  
President Investment Bank

### Professional history and education

Andrea Orcel has been President Investment Bank of UBS Group AG (formerly CEO Investment Bank) since November 2014, having held the same position for UBS AG since November 2012. He became a member of the GEB in July 2012 and was co-CEO of the Investment Bank from July to November 2012. In January 2016, he was appointed Senior Officer Outside of Australia for UBS Australia Branch, and since December 2014, he has additionally held the position as Chief Executive for UBS Limited and UBS AG London Branch. He joined UBS from Bank of America Merrill Lynch, where he had been Executive Chairman Investment Bank since 2009, President of Emerging Markets (excluding Asia) since 2010 and CEO of European Card Services since 2011. Prior to the acquisition of Merrill Lynch by Bank of America, Mr. Orcel was a member of Merrill Lynch's global management committee and Head of Global Origination, which combined Investment Banking and Capital Markets. He held a number of other leadership positions, including President of Global Markets & Investment Banking for Europe, Middle East and Africa (EMEA) and Head of EMEA Origination beginning in 2004. Between 2003 and 2007, he led the Global Financial Institutions Group, of which he had been part since joining Merrill Lynch in 1992. Prior to this, he worked at Goldman Sachs and the Boston Consulting Group. Mr. Orcel holds an MBA from INSEAD and a degree in economics and commerce, summa cum laude, from the University of Rome.

### Other activities and functions

- Board member of UBS Limited
- Board member of UBS Americas Holding LLC



## Kathryn Shih

British, born 1958

**Function at UBS Group AG**  
President UBS Asia Pacific

### Professional history and education

Kathryn Shih became a member of the GEB and was appointed President UBS Asia Pacific of UBS Group AG and UBS AG in January 2016. She has been Head Wealth Management Asia Pacific since 2002. She was CEO of UBS Hong Kong from 2003 to 2008. Prior to this, she held various leadership positions in Wealth Management Asia Pacific. She has been with the firm for over 30 years, since joining Swiss Bank Corporation in 1987 as a client advisor and then serving as Head Private Banking from 1994 to 1998. In the 1980s, Ms. Shih worked for Citibank in the Consumer Services Group and as an executive trainee with PCI Capital Asia Ltd. She was conferred as a Certified Private Wealth Professional by the Private Wealth Management Association, Hong Kong, in 2015 and as a Certified Financial Planner from the Institute of Financial Planners, Hong Kong, in 2001 and completed the Advanced Executive Program at Northwestern University in 1999. Ms. Shih holds a bachelor of arts degree from Indiana University in the US and a master's degree in business management from the Asian Institute of Management in the Philippines.

### Other activities and functions

- Board member of Kenford International Ltd.
- Board member of Shih Co Charitable Foundation Ltd.
- Member of the Hong Kong Trade Development Council (Financial Services Advisory Committee)



## Jürg Zeltner

Swiss, born 1967

**Function at UBS Group AG**  
President Wealth Management until 31 December 2017

### Professional history and education

Jürg Zeltner became President of Wealth Management of UBS Group AG (formerly CEO of UBS Wealth Management) in November 2014, having held the same position for UBS AG since January 2012. He became a member of the GEB in February 2009, and until January 2012, he served as co-CEO of UBS Wealth Management & Swiss Bank. He stepped down from the GEB and his role of President Wealth Management at the end of December 2017. In November 2007, he was appointed as Head of Wealth Management North, East & Central Europe. From 2005 to 2007, he was CEO of UBS Deutschland, Frankfurt, and, prior to this, he held various management positions in the former Wealth Management division of UBS. Between 1987 and 1998, he was with Swiss Bank Corporation in various roles within the Private and Corporate Client division in Berne, New York and Zurich. Mr. Zeltner holds a diploma in business administration from the College of Higher Vocational Education in Berne and is a graduate of the Advanced Management Program at Harvard Business School.

### Other activities and functions

- Board member of the German-Swiss Chamber of Commerce
- Member of the IMD Foundation Board, Lausanne

# Change of control and defense measures

We refrain from restrictions regarding change of control and defense measures that would hinder developments initiated in, or supported by, the financial markets. We also do not have any specific defenses in place to prevent hostile takeovers.

## **Duty to make an offer**

According to the Swiss Financial Market Infrastructure Act, an investor who has acquired more than 33⅓% of all voting rights of a company listed in Switzerland (directly, indirectly or in concert with third parties), whether they are exercisable or not, is required to submit a takeover offer for all listed shares outstanding. We have not elected to change or opt out of this rule.

## **Clauses on change of control**

Neither the employment agreement with the Chairman of the BoD nor any employment contracts with the GEB members or employees holding key functions within the company (Group Managing Directors) contain change of control clauses.

All employment contracts with GEB members stipulate a notice period of six months. During the notice period, GEB members are entitled to their salaries and the continuation of existing employment benefits and may be eligible to be considered for a discretionary performance award based on their contribution during the time worked.

In case of a change of control, we may, at our discretion, accelerate the vesting of and / or relax applicable forfeiture provisions of employees' awards, and defer lapse date of options or stock appreciation rights.

→ **Refer to the "Compensation" section of this report from page 262 for more information**

## Auditors

Audit is an integral part of corporate governance. While safeguarding their independence, the external auditors closely coordinate their work with Group Internal Audit. The Audit Committee, and ultimately the Board of Directors (BoD), supervises the effectiveness of audit work.

→ Refer to “Board of Directors” in this section for more information on the Audit Committee

### External independent auditors

At the Annual General Meeting (AGM) of shareholders in 2017, Ernst & Young Ltd (EY) were re-elected as auditors for the Group for a one-year term of office. EY assume virtually all auditing functions according to laws, regulatory requests and the Articles of Association. Since 2015, Marie-Laure Delarue has been the EY lead partner in charge of the Group financial audit and her incumbency is limited to five years. Since 2016, Ira S. Fitlin has been the co-signing partner for the financial statement audit, with an incumbency limit of seven years. Patrick Schwaller has been the Lead Auditor to the Swiss Financial Market Supervisory Authority (FINMA) since 2015, with an incumbency limited to six years due to prior audit service to UBS in another role. Marc Ryser has been the co-signing partner for the FINMA audit since 2012, with an incumbency limit of seven years.

During 2017, the Audit Committee held eight meetings and one call with the external auditors. The Audit Committee assesses the performance, effectiveness and independence of the external auditors on an annual basis. The assessment is based on interviews with senior management as well as survey

feedback from stakeholders across the bank. Assessment criteria include quality of service delivery, quality and competence of the audit team, value added as part of the audit, insightfulness and the overall relationship with EY. Based on its own analysis and the assessment results, the Audit Committee concluded that EY’s audit has been effective.

### Special auditor for capital increase

At the AGM on 7 May 2015, BDO AG were reappointed as special auditors for a three-year term of office. The special auditors provide audit opinions in connection with capital increases independently from the auditors.

### Fees paid to external independent auditors

The fees (including expenses) paid to EY are set forth in the table below. In addition, EY received CHF 28.9 million in 2017 (CHF 26.0 million in 2016) for services performed on behalf of our investment funds, many of which have independent fund boards or trustees.

Audit work includes all services necessary to perform the audit for the Group in accordance with applicable laws and generally accepted auditing standards, as well as other assurance services that conventionally only the auditor can provide. These include statutory and regulatory audits, attest services and the review of documents to be filed with regulatory bodies. The additional services classified as audit in 2017 included several engagements for which EY were mandated at the request of FINMA.

### Fees paid to external independent auditors

UBS Group AG and its subsidiaries (including UBS AG) paid the following fees (including expenses) to its external independent auditors.

CHF thousand	31.12.17	31.12.16
<b>Audit</b>		
Global audit fees	52,487	49,585
Additional services classified as audit (services required by law or statute, including work of a non-recurring nature mandated by regulators)	12,962	9,214
<b>Total audit</b>	<b>65,449<sup>1</sup></b>	58,799
<b>Non-audit</b>		
Audit-related fees	12,037	7,685
<i>of which: assurance and attest services</i>	6,371	2,893
<i>of which: control and performance reports</i>	5,034	4,177
<i>of which: consultation concerning financial accounting and reporting standards</i>	632	615
Tax fees	1,542	1,747
All other fees	1,906	1,051
<b>Total non-audit</b>	<b>15,486<sup>1</sup></b>	10,484

<sup>1</sup> Of the total audit and non-audit fees of CHF 80,935 thousand for UBS Group AG consolidated, CHF 61,021 thousand relates to UBS AG consolidated.



Audit-related work comprises assurance and related services that are traditionally performed by the auditor, such as attest services related to financial reporting, internal control reviews, performance standard reviews and consultation concerning financial accounting and reporting standards.

Tax work involves services performed by professional staff in EY's tax division and includes tax compliance and tax consultation with respect to our own affairs.

"Other" services are permitted services, which include technical IT security control reviews and assessments.

### Preapproval procedures

To ensure EY's independence, all services provided by EY have to be preapproved by the Audit Committee. A preapproval may be granted either for a specific mandate or in the form of a blanket preapproval authorizing a limited and well-defined type and amount of services.

The Audit Committee has delegated preapproval authority to its Chairperson, and the Group Chief Financial Officer (Group CFO) and Group Controller and Chief Accounting Officer submit all proposals for services by EY to the Chairperson of the Audit Committee for approval, unless there is a blanket preapproval in place. At each quarterly meeting, the Audit Committee is informed of the approvals granted by its Chairperson and of services authorized under blanket preapprovals.

### Group Internal Audit

Group Internal Audit (GIA) performs the internal auditing function for the Group, and in 2017 operated with an approved headcount of 390 full-time equivalent employees. It is an independent and objective function that supports the Group in achieving its strategic, operational, financial and compliance objectives, and the BoD in discharging its governance responsibilities.

GIA independently, objectively and systematically assesses the:

- effectiveness of processes to define strategy and risk appetite as well as the overall adherence to the approved strategy
- effectiveness of governance processes
- effectiveness of risk management, including whether risks are appropriately identified and managed
- effectiveness of internal controls, specifically whether they are commensurate with the risks taken
- soundness of the risk and control culture

- effectiveness and sustainability of remediation activities, originating from any source
- reliability and integrity of financial and operational information, i.e., whether activities are properly, accurately and completely recorded, and the quality of underlying data and models, and
- effectiveness of processes to comply with legal, regulatory and statutory requirements (such as the provisions of the Articles of Association), as well as with internal policies (including the Organization Regulations) and contracts, i.e., assessing whether such requirements are met, and the adequacy of processes to sustainably meet them

Audit reports that include significant issues are provided to the Group CEO, relevant GEB members and other responsible management. The Chairman, Audit Committee and Risk Committee of the BoD are also regularly informed of such issues.

In addition, GIA assures whether issues with moderate to significant impact have been successfully remediated. This responsibility applies to issues identified by all sources: business management (first line of defense), control functions (second line of defense), GIA (third line of defense), external auditors and regulators. GIA also cooperates closely with risk control functions and internal and external legal advisors on investigations into major control issues.

To maximize GIA's independence from management, the Head of GIA reports to the Chairman of the BoD and to the Audit Committee, which assesses annually whether GIA has sufficient resources to perform its function, as well as its independence and performance. In the Audit Committee's assessment, GIA is sufficiently resourced to fulfill its mandate and complete its auditing objectives. GIA's role, position, responsibilities and accountability are set out in our Organization Regulations and the Charter for Group Internal Audit, published at [www.ubs.com/governance](http://www.ubs.com/governance). The latter also applies to UBS AG's internal audit function. GIA has unrestricted access to all accounts, books, records, systems, premises and personnel, and must be provided with all information and data that it needs to fulfill its auditing duties. The Audit Committee may order special audits to be conducted, and other BoD members, committees or the Group CEO may request such audits in consultation with the Audit Committee.

GIA enhances the efficiency of its work through coordination and close cooperation with the external auditors.

## Information policy

We provide regular information to our shareholders and to the financial community.

### Financial reports for UBS Group AG will be published as follows

First quarter 2018	23 April 2018
Second quarter 2018	24 July 2018
Third quarter 2018	23 October 2018

### The Annual General Meeting of shareholders of UBS Group AG will take place as follows

2018	3 May 2018
2019	2 May 2019

→ Refer to the corporate calendar at [www.ubs.com/investors](http://www.ubs.com/investors) for future financial report publication and other key dates, including UBS AG's financial report publication dates

We meet with institutional investors worldwide throughout the year and regularly hold results presentations, attend and present at investor conferences and, from time to time, host investor days. When appropriate, investor meetings are hosted by senior management and are always attended by members of our Investor Relations team. We use various technologies such as webcasting, audio links and cross-location videoconferencing to widen our audience and maintain contact with shareholders globally.

We make our publications available to all shareholders simultaneously to provide them with equal access to our financial information.

Shareholders may opt to receive a physical copy of our annual report or our annual review, which reflects on specific initiatives and achievements of the Group and provides an overview of the Group's activities during the year as well as key financial information. Shareholders can also request UBS Group AG's quarterly financial reports, or download all our financial publications electronically at [www.ubs.com/investors](http://www.ubs.com/investors).

- Refer to [www.ubs.com/investors](http://www.ubs.com/investors) for a complete set of published reporting documents and under "Events & presentations" for a selection of senior management industry conference presentations
- Refer to the "Information sources" section on page 697 of this report for more information
- Refer to "Corporate information" and "Contacts" in the introductory part of this report for more information

### Financial disclosure principles

We fully support transparency and consistent and informative disclosure. We aim to communicate our strategy and results in a manner that allows stakeholders to gain a good understanding of how our Group works, what our growth prospects are and the risks our businesses and our strategy entail. We assess feedback from analysts and investors on a regular basis and, where appropriate, reflect this in our disclosures. To continue achieving these goals, we apply the following principles in our financial reporting and disclosure:

- Transparency that enhances the understanding of economic drivers and builds trust and credibility
- Consistency within each reporting period and between reporting periods
- Simplicity that allows readers to gain a good understanding of the performance of our businesses
- Relevance by focusing not only on what is required by regulation or statute but also on what is relevant to our stakeholders and
- Best practice that leads to improved standards

Consistent with our financial reporting and disclosure principles, we continue to benchmark disclosures in our financial reports against recommendations issued by the Enhanced Disclosure Task Force in 2012. We regard the improvement of our disclosures as an ongoing commitment.

## Financial reporting policies

We report our Group's results at the end of every quarter, including a breakdown of results by business division and disclosures or key developments relating to risk management and control, capital, liquidity and funding management. Each quarter, we publish quarterly financial reports for UBS Group AG on the same day as the earnings releases.

UBS Group AG's and UBS AG's consolidated financial statements are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

→ **Refer to "Note 1 Summary of significant accounting policies" in the "Consolidated financial statements" section from page 329 of this report for more information on the basis of accounting**

We are committed to maintaining the transparency of our reported results and to permit analysts and investors to make meaningful comparisons with prior periods. If there is a major reorganization of our business divisions or if changes to accounting standards or interpretations lead to a material change in the Group's reported results, our results are restated for previous periods as required by applicable accounting standards. These restatements show how our results would have been reported on the new basis and provide clear explanations of all relevant changes.

## US disclosure requirements

As a foreign private issuer, we must file reports and other information, including certain financial reports, with the US Securities and Exchange Commission (SEC) under the US federal securities laws. We file an annual report on Form 20-F and furnish our quarterly financial reports and other material information under cover of Form 6-K to the SEC. These reports are available at [www.ubs.com/investors](http://www.ubs.com/investors) and on the SEC's website at [www.sec.gov](http://www.sec.gov).

An evaluation was carried out under the supervision of management, including the Group CEO, Group CFO and the Group Controller and Chief Accounting Officer, on the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15e) under the US Securities Exchange Act of 1934. Based on that evaluation, the Group CEO and Group CFO concluded that our disclosure controls and procedures were effective as of 31 December 2017. No significant changes have been made to our internal controls or to other factors that could significantly affect these controls subsequent to the date of their evaluation.

→ **Refer to the "Consolidated financial statements" section from page 307 of this report for more information**

# UBS and Society

UBS is committed to creating long-term positive impact for our clients, employees, investors and society. In doing so, we aim to continually improve our efficiency and effectiveness in protecting the environment, respecting human rights and ensuring responsible behavior in all aspects of our operations.

We want to be the financial provider of choice for clients wishing to drive capital toward investments that support the achievement of the United Nations' (UN) Sustainable Development Goals (SDGs) and the transition to a low-carbon economy. Our cross-divisional organization UBS and Society focuses our firm on this direction.

UBS and Society covers our activities and capabilities related to sustainable investing, philanthropy, environmental and human rights policies governing client and supplier relationships, our environmental footprint and community investment.

We intend to make sustainable performance the standard across our firm and part of every client conversation. We work with a long-term focus on providing appropriate returns to all of our stakeholders in a responsible manner. To underline our commitment to UBS and Society, we provide transparent targets and report on progress made against them wherever possible. To this end, we assess our progress against the following aims.

## We aim to be

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### **A leader in sustainable investing (SI) for private and institutional clients**

as demonstrated by size of SI assets under management (AuM) and goals, for which UBS:

- Has set ambitious internal targets to increase AuM for core SI products and mandates
- Has set a target of USD 5 billion of client assets invested into new impact investments by the end of 2021

### **A recognized innovator and thought leader in philanthropy**

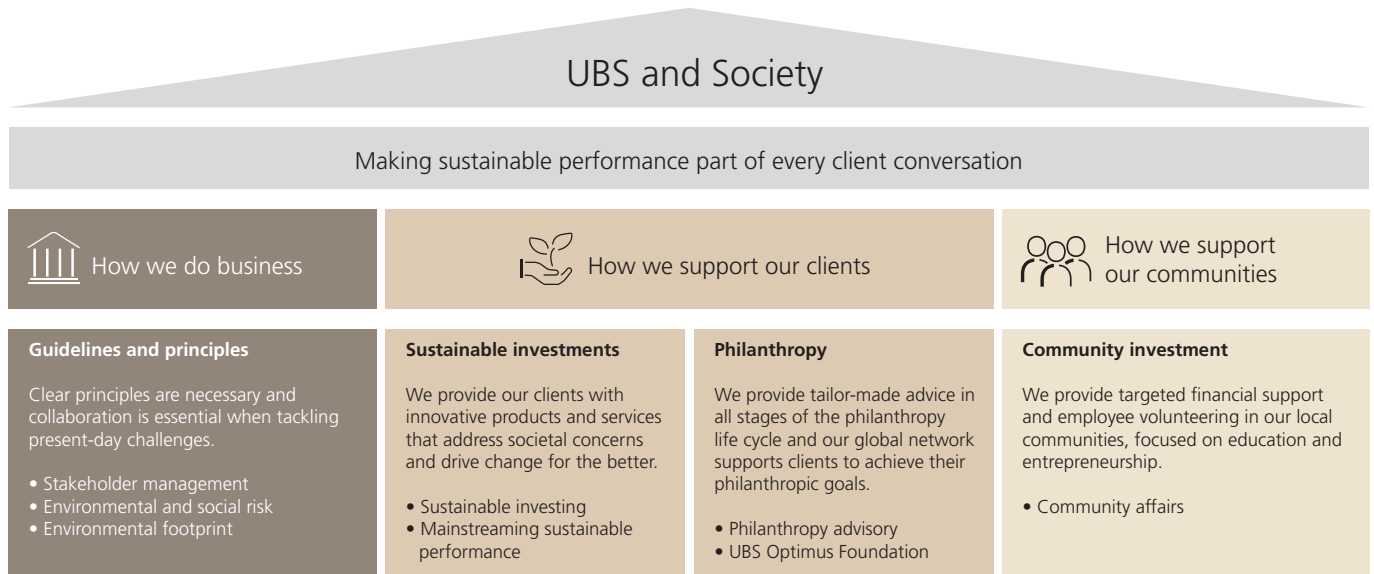
as shown by key stakeholder – employees, clients and society – engagement, and work to support positive social impact, for which UBS:

- Aims to achieve 40% of employees volunteering by the end of 2020, of which 40% of volunteer hours will be skills based
- Combines expertise with capital and networks to increase social impact, as the partner of choice for philanthropists
- Pioneers new ways to bring substantial funding to the SDGs

### **An industry leader in sustainability**

by retaining favorable positions in key environmental, social and governance (ESG) ratings and driving optimization in areas that are important to ESG investors, wherein UBS:

- Supports the transition to a low-carbon economy as laid out in our climate change strategy



UBS and Society's goals are implemented in three ways: how we do business, how we support clients and how we support communities.

- Refer to "Download center" at [www.ubs.com/ubsandsociety](http://www.ubs.com/ubsandsociety) for further documents pertinent to sustainability at UBS
- Refer to "Annual reporting" at [www.ubs.com/investors](http://www.ubs.com/investors) for the UBS 2017 Global Reporting Initiative (GRI) Document containing key sustainability information

**How we do business**

Strong, well-understood principles and policies are the foundation for empowering our employees to operate in a manner that meets the expectations of our stakeholders. We also recognize that we have a role to play in leading debates on important societal topics and in collaborating with other firms and industry bodies to set high standards in and beyond our industry.

**Governance**

Our Board of Directors' (BoD) Corporate Culture and Responsibility Committee (CCRC) approves UBS and Society's overall strategy and monitors the current state and implementation of the Group's programs and initiatives pertaining to corporate culture and corporate responsibility. It also regularly reviews stakeholder expectations and concerns about UBS's societal performance and

corporate culture. The CCRC also monitors and reviews societal trends and other developments on a forward-looking basis and assesses their potential relevance to the Group.

The Group Chief Executive Officer (Group CEO) proposes the UBS and Society strategy and annual objectives to the CCRC, supervises their execution and informs the Group Executive Board (GEB) and CCRC, as appropriate. Reporting to the Group CEO, the Head UBS and Society is UBS's senior-level representative for sustainability issues. The Group CEO and the Head UBS and Society are permanent guests of the CCRC.

Chaired by the Head UBS and Society, the UBS and Society Operating Committee is responsible for the execution of UBS and Society strategy across divisions and regions. Chaired by the Group Chief Risk Officer, the Global Environmental & Social Risk Committee defines an environmental and social risk (ESR) framework and independent controls that align UBS's ESR appetite with that of UBS and Society. The business divisions are responsible for developing, providing resources for and executing the UBS and Society annual objectives in their division as they relate to client relationships, product development, investment management, distribution and risk management.

- Refer to "Board of Directors" in the "Corporate governance" section of this report for more information
- Refer to the Organization Regulations of UBS Group AG at [www.ubs.com/governance](http://www.ubs.com/governance) for the charter of the CCRC

### Key principles and policies

The principles and standards set out in our Code of Conduct and Ethics (Code) apply to all aspects of our business and the way we engage with our stakeholders. The Code supports a culture where ethical and responsible behavior is part of our everyday operations. All employees have to confirm annually that they have read the Code and other associated key documents and policies. In 2017, we continued our educational program about the Code, including a mandatory conduct and culture training module.

The CCRC oversees the annual review of the Code by the GEB and the BoD. Following the 2016 / 2017 review, the current Code was published in mid-2017.

→ **Refer to the Code of Conduct and Ethics of UBS at [www.ubs.com/code](http://www.ubs.com/code) for more information**

The Code incorporates key components of UBS and Society, notably managing environmental and social risks, investing sustainably and contributing to the well-being of our local communities to promote our goal of generating long-term, sustainable and measurable benefits for our clients, shareholders and communities.

The scope, principles, responsibilities and structure of UBS and Society are set out in more detail within our UBS and Society constitutional document.

### Stakeholder relations and employee engagement

The activities we describe in this section are designed to identify the key points at which UBS is able to exert a positive impact on society and the environment. Our regular engagement with a wide range of stakeholders and many significant external organizations and initiatives, supports us in this important process.

Every year, we conduct a materiality assessment, as defined by the guidelines of the Global Reporting Initiative (GRI), the most widely used sustainability reporting framework, to collate stakeholder views on key topics pertaining to our firm's financial, economic, social and environmental performance. In 2017, the assessment was supported by a major online survey, which was completed by nearly 1,600 stakeholders (with clients making up nearly half of this amount). The results are captured in a GRI-based materiality matrix that covers 26 topics, the top-rated being client protection, combating financial crime, conduct and culture, financial stability and resilience, and digital innovation and cyber security.

For the first time, we also included a question on the SDGs in the survey. The SDGs are a set of 17 non-legally binding goals, which aim to end poverty, protect the planet, and ensure prosperity for all by 2030, as part of a global sustainable development agenda. Stakeholders were asked which SDGs UBS should contribute most to, and the most frequent response was quality education, followed by climate action.

Awareness and expertise play an important role in implementing our goals. UBS promotes its employees' understanding of the goals and actions of UBS and Society through a wide range of training and awareness-raising activities and performance management. For example, in 2017, our program on sustainable investing was delivered to around 3,500 employees in our wealth management businesses. In addition, employee volunteering activities across all regions help raise awareness of UBS and Society and our sustainability goals.

→ **Refer to the "Our employees" section of this report for more information on our firm's culture and employees**

## Advancing sustainability in the financial sector – UBS's key activities in 2017

Initiative	Focus topic	Role / activity of UBS	Key outcome of initiative in 2017
Financial Stability Board (FSB) Task Force on Climate-related Financial Disclosures (TCFD)	Climate change	Member of TCFD and feedback provider Commitment to review and align UBS disclosure with TCFD recommendations	Recommendations to companies to disclose the impacts of climate change on their activities and strategy
Alliance of CEO Climate Leaders	Climate change	Joint statement by our CEO and the alliance members to urge G20 governments to act on the recommendations of the TCFD	Continued support for the TCFD recommendations
UN Environment Programme Finance Initiative (UNEP FI)	Climate change	Collaborates in developing approaches to help banks disclose their exposures to climate-related risks and opportunities, as envisioned by the TCFD	Scenario analysis and stress testing approach under development

## Advancing sustainability in the financial sector – UBS's key activities in 2017 (continued)

Initiative	Focus topic	Role / activity of UBS	Key outcome of initiative in 2017
Swiss Energy and Climate Summit	Climate change	Premium partner	Key annual Swiss SME event on climate and energy topics
Natural Capital Finance Alliance	Natural capital	Project partner to pilot test drought scenarios in bank portfolios Member of technical advisory panel of the Advancing Environmental Management Project	Drought stress testing tool and report developed Database and multi-regional input-output analysis to assess natural capital dependencies
G20 Green Finance Study Group (GFSG)	Green finance	Presented stress testing approach at GFSG workshop in Beijing	Synthesis report, as well as background papers on various topics, presented and acknowledged at G20 leaders' summit in Hamburg
Swiss Sustainable Finance (SSF)	Sustainable finance	Member of SSF board	Major events and projects to promote sustainable finance in Switzerland
Association for Environmental Management and Sustainability in Financial Institutes (VfU)	Sustainable finance	Member of VfU board Host and co-organizer of annual VfU / UNEP FI flagship roundtable	Major events and projects to advance sustainable finance in Germany, Austria and Switzerland
Sustainability Accounting Standards Board (SASB)	Sustainable finance	UBS Asset Management represented on SASB Institutional Advisory Group and participated in various committees on metrics	First reports by group of US public companies issued in accordance with SASB
Thun Group of Banks	Human rights	Convener of Group	Paper on the implications of UN Guiding Principles 13b and 17 and stakeholder event to discuss the paper
International Capital Market Association (ICMA)	Green and social bonds	Member of ICMA and on ICMA board	Guidance for the governance of the Green Bond Principles and Social Bond Principles
Organisation for Economic Co-operation and Development (OECD)	Due diligence	Member of advisory group of OECD Responsible Business Conduct (RBC) project	Publication of the OECD RBC guidance for institutional investors
Policy Outlook (POLO) platform	Sustainability regulation	Co-convener of platform	Platform's second annual roundtable (convened by UBS)
WWF Banking on World Heritage Sites	UNESCO (natural) world heritage sites	Participant in WWF-organized workshops and speaker on launch event panel	Reporting paper (includes UBS best practice case study)
Roundtable on Sustainable Palm Oil (RSPO)	Natural capital / palm oil	Member of RSPO financial institutions task force and on RSPO complaints panel Panel speaker at RSPO EU Roundtable 2017 and the RSPO Roundtable (RT 15 in Indonesia)	Review of the updated RSPO Principles and Criteria
Banking Environment Initiative (BEI) Soft Commodities Compact	Soft commodities	Member of BEI Soft Commodities Compact implementation group	Bi-monthly meetings

## Environmental and social risk assessments

	For the year ended			% change from 31.12.16
	31.12.17	31.12.16	31.12.15	
<b>Cases referred for assessment<sup>1</sup></b>	<b>2,170</b>	2,671	2,192	(19)
<b>by region</b>				
Americas	305	395	295	(23)
Asia Pacific	604	556	520	9
Europe, Middle East and Africa	253	341	257	(26)
Switzerland	1,008	1,379	1,120	(27)
<b>by business division</b>				
Wealth Management	485	429	396	13
Wealth Management Americas	22	20	20	10
Personal & Corporate Banking	795	1,226	980	(35)
Asset Management	7	2	0	250
Investment Bank	852	971	776	(12)
Corporate Center <sup>2</sup>	9	23	20	(61)

<sup>1</sup> Transactions and client onboarding requests referred to the environmental and social risk function. <sup>2</sup> Relates to procurement / sourcing of products and services.

### Management of environmental and social risks

We apply an ESR framework to identify and manage potential adverse impacts on the environment and to human rights, as well as the associated environmental and social risks to which our clients' and our own assets are exposed. UBS's comprehensive ESR standards are aligned with the principles expressed in the UBS and Society constitutional document, govern client and supplier relationships, and are enforced firm-wide.

We have set ESR standards in product development, investments, financing and for supply chain management decisions. As part of our due diligence process we engage with clients and suppliers to better understand their processes and policies and to explore how any environmental and social risks may be mitigated. We avoid transactions, products, services, activities or suppliers if they are associated with material environmental and social risks that cannot be properly assessed or mitigated.

Our ESR standards include the description of controversial activities and other areas of concern we will not engage in, or we will only engage in under stringent criteria, as outlined below. In 2017, we introduced new guidelines for companies in the fishing industry and require them to demonstrate that they are not involved in illegal, unreported and unregulated fishing.

Our standard risk, compliance and operations processes involve procedures and tools for identifying, assessing and monitoring environmental and social risks. These include client onboarding, transaction due diligence, product development and investment decision processes, own operations, supply chain management and portfolio reviews.

These processes are geared toward identifying clients, transactions or suppliers potentially in breach of our standards, or otherwise subject to significant environmental and human rights controversies. We use advanced data analytics on companies associated with such risks, integrated into our web-based compliance tool, before we enter into a client or supplier relationship or transaction. This significantly enhances our ability to identify potential risk. In 2017, 2,170 referrals were assessed by our ESR unit, of which 80 were rejected or not further pursued, 395 were approved with qualifications and 18 were pending. Measures to optimize the control framework led to a 19% year-on-year decline in such referrals.

We will not do business if associated with severe environmental or social damage to or through the use of:	We will only do business under stringent criteria in the following areas:
<ul style="list-style-type: none"> <li>– UNESCO world heritage sites</li> <li>– Wetlands, endangered species</li> <li>– High conservation value forests, illegal logging and use of fire</li> <li>– Child labor, forced labor, indigenous peoples' rights</li> </ul>	<ul style="list-style-type: none"> <li>– Soft commodities: palm oil, soy, timber, fish and seafood</li> <li>– Power generation: coal-fired power plants, large dams, nuclear power</li> <li>– Extractives: hydraulic fracturing, oil sands, arctic drilling, coal mining, precious metals, diamonds</li> </ul>



## Climate change

In 2017, the Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (TCFD) published its recommendations to help investors better price climate-related risks and to support a smooth transition to a low-carbon economy. The recommendations are applicable to all sectors and cover an organization's governance, strategy and risk management, as well as metrics and targets related to climate change risks and opportunities. UBS, along with 230 other organizations worldwide, affirmed its commitment to support the voluntary recommendations. We plan to further align our disclosure within the five-year pathway outlined by the TCFD and collaborate within the industry to close gaps.

### Governance

Our climate change strategy is overseen by the CCRC as part of the UBS and Society governance. This oversight role of the CCRC has been embedded in the Organization Regulations of UBS Group AG since March 2018. Within the parameters set by the CCRC, climate-related opportunities are overseen by the UBS and Society Operating Committee and climate change risks by the Global ESR Committee. The CCRC regularly and critically reviews the assessments and steps taken by these management bodies toward executing the climate change strategy.

### Strategy

We believe the transition to a low-carbon economy is vital and we are focused on supporting our clients in preparing for success in an increasingly carbon-constrained world. As a leading global financial services provider, we do this in four different ways:

- We seek to protect our assets from climate change risks by limiting our risk appetite for carbon-related assets and by estimating our firm's vulnerability to climate change risks using scenario-based stress testing approaches and other forward-looking portfolio analyses. So far, no material risk on our

balance sheet has been identified.

- We support our clients' efforts to assess, manage and protect themselves from climate-related risks by offering innovative products and services in investment, financing and research. We have developed several products that allow clients to identify the weighted carbon intensity of their investments and / or to align them with the Paris Agreement.
- We mobilize private and institutional capital toward investments that facilitate climate change mitigation and adaptation and we support the transition to a low-carbon economy as a corporate advisor and / or with our lending capacity.
- We continue to reduce our greenhouse gas (GHG) emissions and increase the firm's share in renewable energy.

### Risk management

#### *Protecting our own assets:*

We have limited our risk appetite for carbon-related assets, for example, in the areas of coal mining and coal-fired power plants, as well as forestry and agriculture. In order to manage our own, and our clients', risk derived from both the physical and transition risks associated with climate change, we have performed both top-down balance sheet stress testing and targeted, bottom-up analysis of specific sector exposures. In doing so, we identified challenges ranging from the suitability of climate scenarios for banking risk modeling to data availability. To address these challenges, we have committed to work toward alignment and knowledge-sharing within the industry. Sixteen banks, including UBS, and the UN Environment Programme Finance Initiative (UNEP FI) have partnered to collaboratively develop analytical tools that will help banks disclose their exposures to climate-related risks and opportunities, as envisioned by the TCFD.

#### *Protecting our clients' assets:*

We offer innovative products and

services, including, for example, capabilities in Asset Management for equity portfolio managers to examine the carbon footprint of their portfolios, the launch of an innovative Climate-Aware rules-based fund and an engagement strategy around climate-related topics. We also offer our research capacity on climate change issues to our clients.

#### *Mobilizing private and institutional capital:*

We mobilize capital to support environmental and social issues, including the transition to a low-carbon economy. For example, Wealth Management aims to include a sustainable investing optionality in its mandate offerings for private clients and we have committed to join other major institutions in an initiative to create an investing and philanthropic platform focused on addressing funding gaps for the SDGs. Asset Management established a comprehensive approach to environmental and social factors and to corporate governance across investment disciplines. The Investment Bank provides capital-raising and strategic advisory services globally to companies offering products that make a positive contribution to climate change mitigation and adaptation, including those in the solar, wind, hydro, energy efficiency, waste and biofuels, and transport sectors. We also strive to be the preferred strategic financial partner for transactions relating to Switzerland's Energy Strategy 2050.

#### *Reducing our direct climate change impact:*

We set quantitative targets and continue to reduce UBS's Group-wide GHG emissions and increase our share in renewable energy in line with our commitment to RE100, a global initiative that encourages multinational companies to make a commitment to using 100% renewable power by 2020. This will reduce the firm's GHG footprint by 75% by 2020 compared with 2004 levels.

## Climate-related metrics 2017

Protecting our own assets	
Financial impact from climate-related risks and opportunities	No significant financial risk on our balance sheet identified in past stress tests. A group of 16 banks, including UBS, and UNEP FI have partnered to refine methodologies for risk and opportunities
Carbon-related assets	CHF 6.5 billion, or 2.8% of total net credit exposure <sup>1</sup>
Protecting our clients' assets and mobilizing private and institutional capital	
Products and services supporting a lower-carbon economy	CHF 72 billion, or 2.3% of UBS clients' total invested assets <sup>2</sup> Total deal value in equity or debt capital market services related to climate change mitigation and adaptation: CHF 43.3 billion, and CHF 5.4 billion in financial advisory services Four strategic transactions in support of Switzerland's Energy Strategy 2050 Support of 82% of climate-related shareholder resolutions <sup>3</sup>
Reducing our own climate change impact	
Greenhouse gas emissions	GHG footprint <sup>4</sup> : 148 kilotons CO <sub>2</sub> e Target to reduce our GHG footprint by 75%, by 2020 (based on 2004 levels) Weighted carbon intensity of the Climate Aware equities strategy: 117.45 t CO <sub>2</sub> e per million of USD revenue (44% lower than its benchmark, the FTSE Developed World Index)

<sup>1</sup> As of 31 December 2017. Total net credit exposure across Personal & Corporate Banking and the Investment Bank, includes traded and banking products, net of allowances, provisions and hedges. As recommended by the TCFD, carbon-related assets are defined as assets tied to the energy and utilities sectors Global Industry Classification Standard. Non-carbon-related assets, such as renewables, water utilities and nuclear power, are excluded. For grid utilities, the national grid mix is applied. <sup>2</sup> Invested assets of products such as sustainably managed properties and infrastructure, and renewable energy companies. <sup>3</sup> Of the proposals we supported, all were voted against the recommendation provided by the issuer. <sup>4</sup> GHG footprint equals gross GHG emissions minus GHG reductions from renewable energy and GHG offsets (gross GHG emissions include: direct GHG emissions by UBS; indirect GHG emissions associated with the generation of imported / purchased electricity (grid average emission factor), heat or steam and other indirect GHG emissions associated with business travel, paper consumption and waste disposal). A breakdown of our GHG emissions (scope 1, 2, 3) is available in our GRI Document at [www.ubs.com/ubsandsociety](http://www.ubs.com/ubsandsociety).

Legend: CO<sub>2</sub>e = equivalent CO<sub>2</sub> emissions

### In-house environmental management

We manage our environmental program through an environmental management system, in accordance with the ISO 14001 standard, while our environmental indicators (energy, travel and paper) and GHG emissions data is externally verified on the basis of ISO 14064 standards. In addition, in 2017 we received our first ISO 50001 certification (energy management) for European locations.

Our environmental program encompasses investments in sustainable real estate and efficient information technology, energy and water efficiency, paper and waste reduction and recycling, the use of environmentally friendly products, such as renewable energy or recycled paper, and business travel and employee commuting reduction.

In 2017, we further reduced UBS's GHG emissions by 11%, or 10% per full-time employee, year on year. We recorded a total reduction of 59% from baseline year 2004. We reduced our energy consumption 5% compared with 2016 and 19% compared with 2012. Of UBS's worldwide electricity consumption, 56% was sourced from renewable energy.

### Responsible supply chain management

We aim to reduce negative environmental and social effects of the goods and services UBS purchases, and we engage with suppliers to promote responsible practices. Our responsible supply chain management (RSCM) principles embed UBS's ethics and values in our interactions with our suppliers, contractors and service partners. We apply an RSCM framework to identify, assess and monitor supplier practices with regard to human and labor rights, the environment, health and safety, and anti-corruption principles. In 2017, remediation measures were requested for 23% of suppliers of newly sourced goods and services with potentially high impact to improve their adherence to UBS's RSCM standards.

## Sustainability ratings and recognitions<sup>1</sup>

Ratings and recognitions	Scope	UBS result
Dow Jones Sustainability Indices (DJSI)	Environmental, social and governance (ESG) performance	Industry group leader Index member of DJSI World and DJSI Europe
CDP	Climate change	Climate A List
Sustainalytics	ESG performance	Leader score within our industry 97th percentile ranking
MSCI	ESG performance	A rating Top three among primary peer group <sup>2</sup>
Oekom	ESG performance	Corporate responsibility prime status
FTSE4Good Index	ESG performance	Index member
Euromoney Private Banking Global Award 2017	Philanthropic advice	Winner
Euromoney Private Banking Global Award 2017	SRI / Social impact investing	Winner
The Banker Investment Banking Awards 2017	Corporate social responsibility (CSR)	Winner – Most innovative investment bank for CSR
The Banker Global Private Banking Awards 2017	Philanthropy services globally	Winner – Best private bank for philanthropy services globally
GRESB Real Estate, Debt and Infrastructure assessments	Sustainability performance of real asset portfolios worldwide	Submitted 22 funds across all three GRESB assessments Ten funds (with total AuM of over CHF 33.1 billion) awarded five-star ratings, with seven funds ranking first in their respective peer groups
Principles for Responsible Investing Assessment Report 2017	Property and infrastructure	Received A+ grades
Pensions and Investments World Pension Summit 2017	Innovation and investment awards	UK National Employment Savings Trust (NEST) awarded for UBS Climate Aware
European Fund Launch of the Year award		Received for UBS Climate Aware
Bloomberg New Energy Finance	Renewable energy and cleantech financing	Ranked third in league table on public markets
Lord Mayor's Dragon Awards (UK)	Community investment	Winner – Accelerator Award 2017 for social entrepreneurship program
Corporate Engagement Awards (UK)	Community investment	Gold winner – Best community involvement during a CSR program
National CSR Awards (UK)	Community investment	Runner-up in the Best Partnership in the Community category
Commonwealth CSR Award (Taiwan)	Community investment	Winner

<sup>1</sup> All information provided is as of 31 December 2017. <sup>2</sup> As defined in the UBS Compensation Report 2017.

### Ratings and recognitions

In 2017, UBS continued to gain industry recognition for its commitment to improving performance under ESG criteria and for its efforts in offering clients world-class expertise and sustainable products. In 2017, our firm also maintained its leadership position in the Diversified Financial Services and Capital Markets industry group of the DJSI, the most widely recognized sustainability rating, for the third year running. The DJSI evaluates companies' sustainability practices and recognizes the best performers. The RobecoSAM Industry Group Leader Report notes that UBS continues to lead in its industry on sustainability efforts, which are directed through UBS and Society. It highlights the large choice of sustainable investment solutions UBS offers to its clients, such as impact funds, long-term theme funds, renewable energy and cleantech financing, green bonds, eco-mortgages and energy check-ups for small and medium-sized enterprises (SMEs).

Other major achievements include MSCI ESG Research upgrading UBS to an A rating, Sustainalytics ranking UBS as an industry leader and CDP awarding UBS a position on the Climate A List.

### How we support our clients

We strive to systematically incorporate the economic impacts of ESG issues into the products and services we provide to clients. We support corporate and institutional clients who want to generate positive environment and social impact using our corporate advisory expertise or by directing capital through our lending or investment capacity. We assist private and institutional clients in their desire to invest in accordance with their own social and environmental objectives and we are proactive in discussing these issues with them. As a preferred partner for global philanthropists, we work toward achieving the UN's ambitious SDGs. Our experts and in-house foundation offer clients unique access to social and financial innovation and philanthropic advice, as well as tailored program design, co-funding and co-development opportunities.

### Sustainable investments

As of 31 December 2017, sustainable investments increased to over CHF 1.1 trillion, representing nearly 35% of our total invested assets, compared with CHF 976 billion as of the end of 2016. Major increases in relative terms were observed for our investments in the integration and third-party categories, which increased 95% and 43%, respectively, compared with 2016. More details can be found in the "Sustainable investments" table further below.

## Key sustainable investing products and services in 2017 (select)<sup>1</sup>

Product / service	Business division	Key features
The Rise Fund	Wealth Management (WM), Wealth Management Americas (WMA)	<ul style="list-style-type: none"> <li>– USD 325 million raised</li> <li>– Invests in seven sectors – education, financial services, health care, infrastructure, energy, food and agriculture, and IT – with a dual mandate: generating competitive financial returns and measurable positive societal outcomes</li> </ul>
Rethink Impact Fund	WMA	<ul style="list-style-type: none"> <li>– USD 75 million raised</li> <li>– Direct-access social impact private equity fund that invests in early- to growth-stage, high-impact companies, primarily in the United States. The fund focuses on four themes: health care, economic opportunity, environmental sustainability, and education</li> </ul>
OrbiMed Asia Partners III	WM	<ul style="list-style-type: none"> <li>– USD 85 million raised</li> <li>– Growth investments in health care companies in China and India, focusing on biopharmaceuticals, medical technology and health care services</li> </ul>
UBS Long Term Themes Equity Fund UBS Long Term Themes Portfolio SMA	WM, Asset Management (AM)	<ul style="list-style-type: none"> <li>– USD 1.5 billion held in Long Term Themes Fund and mandates</li> <li>– Invests in companies that are solution providers for challenges such as water scarcity, emerging market infrastructure and health care, waste management and recycling</li> </ul>
Climate Aware	AM	<ul style="list-style-type: none"> <li>– Innovative rules-based equities strategy to address carbon risk in portfolios</li> </ul>
UBS Clean Energy Infrastructure Switzerland 2	AM	<ul style="list-style-type: none"> <li>– Launched in September 2017, with capital commitments of CHF 200 million as of the end of 2017</li> <li>– Solution for institutional investors seeking an exposure to the renewable energy and energy infrastructure space with focus in Switzerland</li> </ul>
Global Impact Fund	AM	<ul style="list-style-type: none"> <li>– Exposure to global equity markets in stocks with material exposure to impact categories like climate change or health that are also sustainable stocks, i.e., those selected based on strong ESG analysis and traditional valuation discipline</li> </ul>
US Sustainable Equity Fund	AM	<ul style="list-style-type: none"> <li>– Combines price-to-intrinsic value investment philosophy with careful consideration of companies' sustainability profiles</li> </ul>
SI-focused UBS Manage solutions	WM	<ul style="list-style-type: none"> <li>– Several investment mandate solutions investing in instruments with a high sustainability rating (to the extent possible)</li> <li>– Launched for market France</li> </ul>
ESG Portfolio Analyzer	WMA	<ul style="list-style-type: none"> <li>– Provides transparency and analysis of ESG topics in client portfolios</li> </ul>
UBS Sustainability Analytics	WM, Personal & Corporate Banking (P&C)	<ul style="list-style-type: none"> <li>– Enables clients to achieve full transparency by screening their portfolio for potentially harmful industry exposure and, if appropriate, to make exclusions to protect it against reputational risks</li> </ul>
Philanthropy Advisory	WM, WMA	<ul style="list-style-type: none"> <li>– A total of approximately 370 ultra high net worth individuals or philanthropists attended UBS Philanthropy Forums in the Americas, Asia and Switzerland</li> <li>– Advisory services for over 400 clients</li> </ul>
UBS Optimus Foundation	CC	<ul style="list-style-type: none"> <li>– CHF 59.5 million raised in donations / CHF 58.5 million grants to partners approved</li> <li>– Pioneering Educate Girls Development Impact Bond (DIB): on track to meet its enrollment and education targets</li> <li>– World's first large-scale DIB launched (Maternal and Newborn DIB)</li> </ul>
Social Investment Toolkit	WM	<ul style="list-style-type: none"> <li>– Guide for social entrepreneurs with eight modules ranging from impact story to creating an investor pitch (developed with Ashoka)</li> </ul>

### Key sustainable investing products and services in 2017 (select)<sup>1</sup> (continued)

Product / service	Business division	Key features
Program-related investment	WM, CC (UBS Optimus Foundation, Community Affairs)	<ul style="list-style-type: none"> <li>Investments in the form of a loan, enabling donors to regain the initial investment plus a rate of return and allowing philanthropic capital to be recycled</li> <li>Loans for the UBS UK Donor-Advised Foundation and UBS Optimus Foundation UK successfully completed with two charities. Product offering being made available to clients</li> </ul>
UBS Unique ETF	WM	<ul style="list-style-type: none"> <li>Invests in companies based on 19 equality standards, including gender balance, equal compensation and work-life-balance, policies, transparency and accountability</li> <li>Donation of 5% of management fee to a portfolio of SDG5-related projects managed by the UBS Optimus Foundation</li> </ul>
Voting (on behalf of clients)	AM	<ul style="list-style-type: none"> <li>Provided instructions (based on AM's corporate governance principles) to vote on 100,069 separate resolutions at 9,877 company meetings</li> </ul>
Green and sustainable bonds	Investment Bank (IB)	<ul style="list-style-type: none"> <li>Seven green and sustainable bond transactions supported</li> </ul>
LGBT Career Equality and Military Veterans indices	IB, WMA	<ul style="list-style-type: none"> <li>Companies selected include leaders in giving opportunities and support to veterans and have top scores in the Human Rights Campaign Corporate Equality Index</li> </ul>
Global Sustainability Leaders index	IB, WMA	<ul style="list-style-type: none"> <li>Companies selected include leaders with regard to the UN Global Compact principles</li> </ul>
Renewable energy and cleantech financing	IB	<ul style="list-style-type: none"> <li>Participation in significant renewables and cleantech deals globally, for both established utilities clients and innovative growth stage companies</li> </ul>
Energy check-up for SMEs <sup>2</sup>	P&C	<ul style="list-style-type: none"> <li>UBS SME efficiency bonus for energy reduction plan with overall energy savings of 78,590 MWh/a, equivalent to the annual energy consumption of approximately 4,000 single-family homes</li> </ul>
Preferred strategic partner for advisory and financing transactions related to Switzerland's Energy Strategy 2050	P&C	<ul style="list-style-type: none"> <li>Supports energy utilities in raising capital on international capital markets to progress their quest for renewable energy</li> <li>Four strategic transactions executed for Switzerland's Energy Strategy 2050</li> </ul>

<sup>1</sup> All information provided is as of 31 December 2017. <sup>2</sup> Information provided is as of 31 December 2016.

Wealth Management aims to systematically include an SI optionality in its mandate offerings and to provide clients with impact investing products and sustainable mutual fund solutions. Enhanced UBS Manage Sustainable Investing™ offerings with 100% (excluding liquidity) sustainable and impact investments went live in early January 2018. These offerings are based on our global Chief Investment Office's (CIO) UBS House View. In 2017, it further expanded its SI optionality to core affluent and high net worth clients by launching a dedicated offering for French clients. Wealth Management also arranges platforms, roundtables and networking events for our clients to exchange ideas and gather know-how.

Wealth Management Americas expects to see considerable growth in SI assets. A key focus for Wealth Management Americas is the expansion of its solutions platform. In 2017, two impact investment deals were successfully closed (Rethink

Impact and TPG's The Rise Fund), thereby establishing UBS as a key player in this area. Within listed markets, Asset Management's long-term themes strategy was launched, and a number of new third-party solutions were added to strengthen the platform. A variety of educational initiatives were rolled out, as raising awareness among financial advisors remains a critical focus to support the growth of the SI business.

Our global CIO regularly translates key societal and environmental concerns into investment themes as part of its Longer Term Investments series and global Research-based Advice. In 2017, some notable examples of this were the World Economic Forum 2017 white paper on mobilizing private wealth for public good, the development of the first 100% sustainable investing cross-asset portfolio, gender lens wealth, business with impact or the social innovator toolkit, a guide for social entrepreneurs.

Asset Management is committed to integrating sustainability into its entire investment approach. We are convinced that sustainable and impact investing can add value to portfolios within the same risk / return profile. Investment strategies customized to address particular sustainability objectives, such as reducing carbon risk or tilting a portfolio toward specific environmental, social or governance factors, in combination with traditional financial and risk / return expectations are increasingly popular. Over the last decade, Asset Management has developed capabilities to provide customized solutions to meet the specific goals and needs of individual investors. It offers a wide range of SI strategies across various asset classes, integrating sustainability and impact into its entire mainstream offerings, including in active equities, fixed income, hedge funds, infrastructure and private equity, real estate and passive strategies.

The Investment Bank provides capital-raising and strategic advisory services globally to companies offering products that make a positive contribution to climate change mitigation and adaptation, including those in the solar, wind, hydro, energy efficiency, waste and biofuels, and transport sectors. In 2017, the total deal value in equity or debt capital market services relating to these areas was CHF 43.3 billion, and CHF 5.4 billion in financial advisory services.

Personal & Corporate Banking clients have access to appropriate and relevant products from Asset Management and Wealth Management that follow our Group-wide approach to SI. We also support Swiss SMEs in their energy-saving efforts and transition to a low-carbon economy. SMEs benefit from initiatives such as energy check-ups or leasing bonuses (financial contributions toward enhancing environmental performance) for utility vehicles and production machines.

Having the financial expertise, networks and access to the capital required to build or support innovative financial products, we remain committed to introducing and funding innovative financial solutions. Examples include: The Rise Fund, a major private equity impact investment vehicle, and the substantial funds raised for Orbimed.

As of 31 December 2017, we also held green bonds in the amount of CHF 565 million in our high-quality liquid assets portfolios under the management of Corporate Center – Group Asset and Liability Management.

→ Refer to [www.ubs.com/sustainableinvesting](http://www.ubs.com/sustainableinvesting) for more information

## Sustainable investments<sup>1</sup>

CHF billion, except where indicated	GRI <sup>2</sup>	For the year ended			% change from
		31.12.17	31.12.16	31.12.15	31.12.16
<b>Core SI products and mandates</b>	FS11	<b>176.4</b>	145.4	138.5	21
Integration <sup>3</sup>	FS11	<b>10.8</b>	5.5	3.4	95
Integration / RPI <sup>4</sup>	FS11	<b>61.6</b>	54.6	49.1	13
Impact investing <sup>5</sup>	FS11	<b>3.2</b>	2.5	0.8	28
Exclusionary screening <sup>6</sup>	FS11	<b>91.2</b>	76.1	79.2	20
Third-party <sup>7</sup>	FS11	<b>9.6</b>	6.7	6.1	43
<b>Norms-based screening<sup>8</sup></b>	FS11	<b>927.5</b>	830.4	795.1	12
<b>Total sustainable investments</b>	FS11	<b>1,103.9</b>	975.8	933.5	13
<b>UBS total invested assets</b>		<b>3,179</b>	2,821	2,689	13
SI proportion of total invested assets (%)	FS11	<b>34.7</b>	34.6	34.7	

<sup>1</sup> All figures are based on the level of knowledge as of January 2018. <sup>2</sup> FS stands for the performance indicators defined in the Global Reporting Initiative Financial Services Sector Supplement. <sup>3</sup> Applies to the active selection of companies, focusing on how a company's strategies, processes and products impact its financial success, the environment and society. This includes best-in-class, thematic investments or the systematic and explicit inclusion of environmental, social and governance (ESG) factors into traditional financial analysis. <sup>4</sup> UBS Asset Management Responsible Property Investment (RPI) strategy. <sup>5</sup> Impact investments are targeted investments with a financial return and a clear social and / or environmental return objective. <sup>6</sup> Includes customized screening services (single or multiple exclusion criteria). <sup>7</sup> SI products from third-party providers applying either integration, impact investing and / or exclusionary approach. <sup>8</sup> Reporting scope expanded in 2015 to include all actively managed discretionary segregated mandates. Duplication with other SI categories was subtracted to avoid double counting.

**Sustainable investing** is an approach that seeks to incorporate environmental, social and / or governance considerations into investment decisions. SI strategies seek to achieve one or several of the following objectives: achieve a positive environmental or social impact, align investments with an investor's personal values or improve portfolio risk and return characteristics.

**Core SI** includes all SI products that involve a strict and diligent asset selection process including exclusions and / or different types of positive selection such as best-in-class, thematic or ESG integration and impact investing.

**Norms-based screening** includes all assets that are subject to restrictions under UBS policy on the prohibition of investments in companies related to anti-personnel mines and cluster munitions (includes all actively managed discretionary segregated mandates and all actively managed retail and institutional funds).

### Philanthropy

Building on our award-winning track record and 13 years of experience, we have a global team of in-house experts in place who specialize in all areas of philanthropy and strategic charitable giving. We support clients as they develop their own philanthropic approach, from offering objective, independent and tailored advice, to providing them with the opportunity to attend dedicated events and access a global network of like-minded individuals with whom to collaborate and share their ideas and knowledge.

→ Refer to [www.ubs.com/philanthropy](http://www.ubs.com/philanthropy) for more information

### UBS Optimus Foundation

The UBS Optimus Foundation is an award-winning grant-making foundation that helps our clients use their wealth to drive positive and sustainable social change for children. The foundation connects clients with inspiring entrepreneurs, new technologies and proven models that help improve the lives of children in a variety of ways. It selects and continuously monitors programs that improve children's health, education and protection and that have the potential to be transformative, scalable and sustainable. As UBS covers all of the Foundation's administrative costs, it guarantees that 100% of all donations go to the support programs. In 2017, the Foundation's work helped improve the well-being of 2.1 million children globally.

Effective philanthropy is about more than simply funding existing programs. It is also about long-term thinking. That is why the Foundation also supports partners in building their capacities, enabling them to reach more children more effectively and efficiently, funds research to better understand the issues that prevent children from thriving, and undertakes advocacy efforts with partners to promote wider adoption and scaling of the most promising programs.

→ Refer to [www.ubs.com/optimus](http://www.ubs.com/optimus) for more information

### How we support our communities

At UBS, we recognize that our long-term success depends on the health and prosperity of the communities of which we are a part. Our approach is to build sustainable and successful partnerships with non-profit organizations and social enterprises to help our contributions have a lasting impact. Our Community Affairs programs seek to overcome disadvantage through long-term investment in education and entrepreneurship in the communities within which we operate.

We provide focused financial and human support, including through the use of skills-based employee volunteering programs and client participation where appropriate. Our employees are at the heart of the program delivery and act as role models for young people and as mentors for social entrepreneurs. UBS provides employees with up to two days of paid leave for volunteering annually.

We play a role in the stewardship of a healthy social and financial future for our communities, working in partnership with clients, as well as the public and philanthropic sectors. Examples include:

- Promoting and strengthening the vocational education system and providing access also to disadvantaged youth. Within SwissSkills, a new public-private partnership, UBS volunteers delivered meaningful advice at job fairs across Switzerland.
- UBS Japan's Rural Investment in the Community & Environment (RICE) project, with over 7,000 primary school children having received environmental education and undertaken biodiversity research.
- Partnering with the Bridge Academy secondary school in London, a national exemplar of business partnership in education driving social mobility through excellent and inclusive education, rooted in the local community.
- Project Entrepreneur, an initiative to increase the number of female-founded high-growth companies in the US, with over 1,500 women entrepreneurs trained, and currently expanding to include more accelerator participants and additional resources and startup services for venture competition applicants and alumni.

Since 2014, our impact reporting has incorporated the London Benchmarking Group's standard model. UBS operates according to a global framework to deliver community and business impacts, through a regionally devolved model, allowing for effective evaluation, while aligning programs to address local community issues and meet local business priorities. We are continuing to enhance and develop this framework, which, together with global coordination of reporting, allows us to effectively evaluate and focus our programs. In 2017, UBS made direct cash contributions totaling CHF 39 million, including support through its affiliated foundations in Switzerland and the UBS Anniversary Education Initiative. Over 89% of UBS's Community Affairs grants were made in the areas of education and entrepreneurship. 31% of our employees volunteered in our communities compared with 30% in 2016. Additionally, UBS contributed a total of CHF 5.5 million to the UBS Optimus Foundation.

Our Community Affairs program benefited 126,279 young people and entrepreneurs across all of the regions in which we operate.

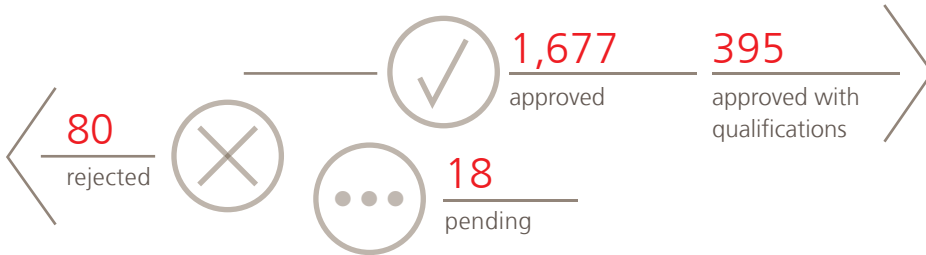
### UBS Global Visionaries

In 2017, we merged the best of our Social Innovators program into the UBS Global Visionaries program to strengthen our support for social entrepreneurs. The program aims to support social entrepreneurs who are shaping our future and connect them to our employees, partners and clients to jointly change the society we live in.

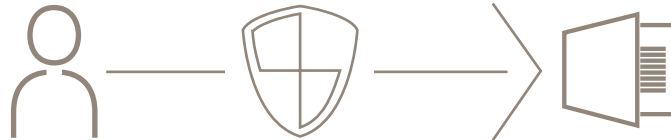




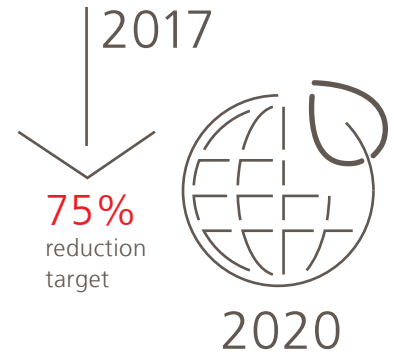
## How we do business



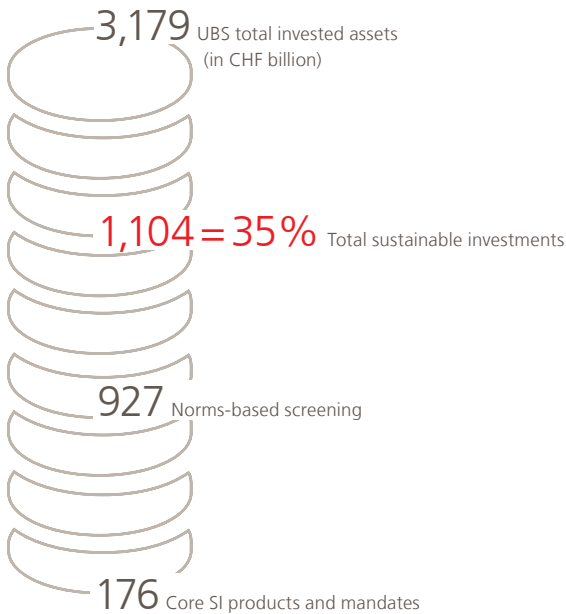
Remediation measures requested for **23%** of suppliers of newly sourced goods and services with potentially high impacts



**59%**  
reduction of UBS GHG emissions

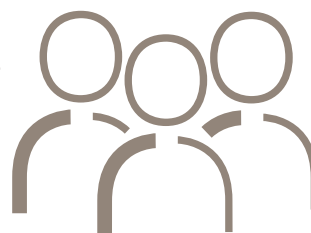


## How we support our clients



## How we support our communities

**CHF 44.5** million direct cash contributions, including support through its affiliated foundations in Switzerland and the UBS Anniversary Education Initiative, and funds to the UBS Optimus Foundation.



**126,279** beneficiaries reached globally, from 134 community partners

**20,140** employees volunteered

**168,226** hours on community projects

## UBS Optimus Foundation



CHF **59.5** million raised in donations

CHF **58.5** million grants to partners approved

**2.1** million children reached

# Our employees

## Overarching aims and objectives

### Build engagement and strengthen our **corporate culture**

- Invest in large-scale culture programs across the organization
- Measure, foster and recognize culture-building behaviors

### Remain an **employer of choice** for people at all career stages

- Maintain attractiveness to external talent and a highly motivated workforce
- Focus on internal mobility and provide long-term career prospects

### Strengthen our **diverse and inclusive** workplace

- Aspiration to increase the ratio of women in management roles to one-third
- Support activities focused on increasing the inclusiveness of our culture

### Effectively **develop, manage and retain our talent**

- Provide a wide range of learning opportunities to meet the needs of employees at all levels
- Prepare current and future leaders for enhanced responsibilities and leadership excellence

Our employees' skills, experience and commitment are key to delivering on our business strategy. Our human resource (HR) strategy therefore seeks to hire, develop and engage talented employees at all levels who have the diverse backgrounds and capabilities to advise our clients, develop new products, manage risk and adapt to evolving regulations. We invest in our employees and promote initiatives that build engagement and a cohesive, collaborative culture.

## Building our culture

Having a strong culture is vital to our sustained success. In 2013, we introduced the three keys to success – our Pillars, Principles and Behaviors. They help us achieve our vision and execute our strategy, shaping how we work together and influencing everything we do. Since then, we have focused on strengthening our culture and embedding our core values more deeply into the identity of the firm. In 2017, we continued with our firm-wide culture-building program, working closely with senior managers from all divisions, functions and regions. A key initiative remains our very successful Group Franchise Awards (GFA) program, which we implemented in 2016 to recognize culture-building behavior. The GFA program allows us to track cross-business collaboration and develop ideas for simplifying our processes. The program has maintained strong momentum in terms of both the number and the quality of submissions from across the entire firm.

## Attracting and recruiting talent

A positive, cohesive culture is both advanced and sustained through individuals who share our vision and core values.

We source such employees through a variety of channels. Our first priority is to consider current employees for open roles. Internal mobility builds connections across the firm and enables employees at all levels to leverage existing skills and develop new ones. In 2017, we introduced a new, in-house-built tool that matches employee career preferences with open roles and helps identify high-quality internal candidates. Having long-term career prospects with us is an important driver of career satisfaction for existing employees and it attracts external talent.

## Our three keys to success



### **Our Pillars** are the foundation for everything we do.

Capital strength  
Efficiency and effectiveness  
Risk management

### **Our Principles** are what we stand for as a firm.

Client focus  
Excellence  
Sustainable performance

### **Our Behaviors** are what we stand for individually.

Integrity  
Collaboration  
Challenge

Externally, we source candidates directly and through employee referrals, job boards, social media, advertisements and external recruitment agencies. In 2017, we launched our employer value proposition (EVP) globally, which explains what we stand for as an employer and what differentiates us. Our EVP is aligned with our corporate strategy, the three keys to success and our brand. As an employer of choice, we received more than 730,000 applications in 2017 and hired a total of 9,881 external candidates at all career stages.

Throughout 2017, we continued to hire employees and see growth in our Business Solutions Centers (BSCs) in the US, Switzerland, India, China and Poland. All UBS Corporate Center functions are represented in our BSCs; this co-location of teams enhances collaboration and efficiencies. At year-end, offshore

and nearshore employees accounted for approximately 21% of our global Corporate Center workforce.

Hiring and training entry level talent is a priority for all business divisions. In 2017, we hired 394 new university graduates into our graduate talent programs, as well as 578 interns for various roles. In Switzerland, we hired 294 apprentices for business and IT roles, and 171 trainees into our bank entry programs for high school graduates.

→ Refer to [www.ubs.com/careers](http://www.ubs.com/careers) for more information and to follow our careers blog

→ Refer to [www.ubs.com/awards](http://www.ubs.com/awards) for more information on UBS's rankings as an employer

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## Top-employer honors in 2017

- World's Most Attractive Employers (Universum): global top 50
  - Switzerland's Most Attractive Employers (Universum): ranked second by business students
  - Global Ideal Employers, Global Female Ideal Employers (eFinancialCareers): top 10
  - Bloomberg Financial Services Gender-Equality Index member
  - Ideal Employers (eFinancialCareers): Asia top 5; Europe top 10; North America top 20
  - Working Mother 100 Best Companies (Working Mother, US)
  - Best Places to Work for LGBT Equality (Human Rights Campaign, US)
  - The Times Top 100 Graduate Employers (The Times, UK)
-

### Diversity and inclusion

Workforce diversity is a business imperative for us. In our experience, teams with diversity in gender, race, age, ethnicity, education, background, disability, sexual orientation and other aspects better understand and relate to our equally diverse clients' needs. Likewise, diversity of thought, opinion and experience helps us make better decisions and drives innovation, while an inclusive work environment attracts high-quality people and makes the firm a better place to work. Our HR policies and procedures underscore our commitment to a diverse and inclusive workplace, with equal opportunities for all employees.

We are committed to hiring, retaining and promoting more women across the firm. In 2017, we continued to build on our aspiration to increase the ratio of women in management roles to one-third. We embedded management accountability at all levels for supporting this goal and continued to develop and refine career support, HR processes and technology solutions to help us better retain women at all career stages. In order to better understand and address the motivations of voluntary senior leavers, we undertook a landmark global attrition study in mid-2017, surveying nearly 2,000 former employees. Results are being examined at a divisional level and actions are being defined.

The UBS Career Comeback Program is an initiative we launched in Switzerland and the US in 2016 and extended to the UK in 2017. The program supports professionals who wish to return to corporate jobs after a career break and features on-the-job experience, classroom learning and mentoring. The program has proven successful: so far, Career Comeback has given 65 women and two men the opportunity to relaunch their careers.

In addition to our strategic initiatives, every year we support numerous activities in each business division and region focused on increasing the inclusiveness of our culture through coaching and education, for example, to raise awareness of and reduce unconscious bias. Integral to this effort are our employee networks, which regularly host events on gender, culture, life stage, sexual orientation and other topics. In 2017, we sponsored 43 employee networks globally, with more than 17,000 members.

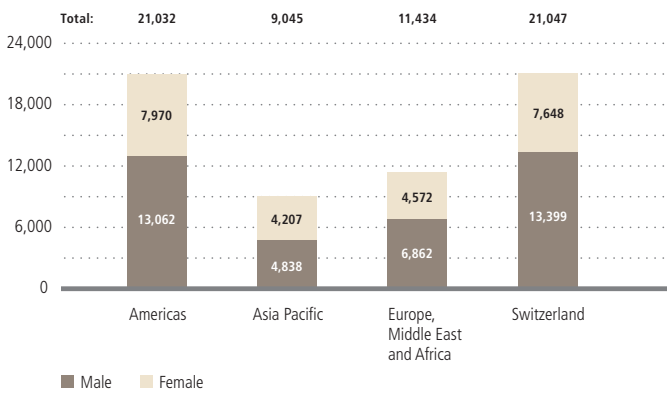
→ Refer to [www.ubs.com/diversity](http://www.ubs.com/diversity) for more information

### Personnel by region

		As of		% change from
		31.12.16	31.12.15	31.12.16
<i>Full-time equivalents</i>	<b>31,12.17</b>			
Americas	<b>20,770</b>	20,522	20,816	1
<i>of which: USA</i>	<b>19,944</b>	19,695	19,897	1
Asia Pacific	<b>8,959</b>	7,539	7,539	19
Europe, Middle East and Africa	<b>11,097</b>	10,746	10,505	3
<i>of which: UK</i>	<b>5,274</b>	5,206	5,373	1
<i>of which: rest of Europe</i>	<b>5,662</b>	5,373	4,957	5
<i>of which: Middle East and Africa</i>	<b>161</b>	167	176	(4)
Switzerland	<b>20,427</b>	20,581	21,238	(1)
<b>Total</b>	<b>61,253</b>	59,387	60,099	3

## Gender distribution by geographical region<sup>1</sup>

By headcount, as of 31.12.17



<sup>1</sup> Calculated on the basis that a person (working full time or part time) is considered one headcount (in this graph only). Looking at subregional data, the Americas consists of the US at 20,184 and the rest of the Americas at 848. EMEA consists of the UK at 5,437, the rest of Europe at 5,822 and Middle East and Africa at 175. This accounts for the total UBS employee number of 62,558 as of 31 December 2017, which excludes staff from UBS Card Center, Hotel Seepark Thun, Wolfsberg and the Widder Hotel.

### Developing and managing our workforce

We expect our leaders to be champions for our strategy and culture as well as effective managers and advocates for their employees. We develop current and future leaders through a leadership program suite that spans from first-level line managers to senior leadership levels. Programs like our Senior Leadership Experience for our most senior executives and the Senior Leadership Program for managing directors help define our expectations for leadership excellence, build confidence in our strategy and increase commitment to the firm's three keys to success.

A skilled workforce to execute our business strategy is crucial to our success. We provide learning and development opportunities to all our employees to support them in enhancing their knowledge and skills at all ages and career stages. For example, we offer development programs, business education and role-specific training. Furthermore, as one of the top

educators of entry level talent in Switzerland, we train more than 1,800 young people each year, including apprentices, interns and high school and university graduates. In 2017, our permanent employees participated in approximately 765,500 development activities, including mandatory training on compliance, business and other topics. This was an average of 12.2 training sessions, or 2.3 training days, per employee.

Our key talent programs prepare high-potential employees for line management or senior leadership roles. Training for client-facing staff in 2017 included a Master in Wealth Management degree program and a rigorous training program for aspiring financial advisors in the US.

All employees and managers are also asked to consider development activities and career planning in regular, two-way discussions. At UBS, development includes experience, exposure and education. Line managers are expected to actively support both development and internal mobility, as they are key factors for professional growth, engagement and retention.

### Managing performance

Effective people management is key to sustaining a high-performing organization. Our annual performance reviews assess both performance and behavior. Measuring what was achieved and how those results were achieved underscores the importance of the firm's Behaviors for individual and Group success, and both ratings are considered in development, reward and promotion decisions.

### Rewarding performance

Our compensation philosophy is to align the interests of our employees with those of our clients and investors, building on our three keys to success – our Pillars, Principles and Behaviors. Our Total Reward Principles establish a framework that balances sustainable performance and prudent risk-taking with a focus on conduct and sound risk management practices.

→ **Refer to the "Compensation" section of this report for more information**

## UBS University

Knowledge is what sets us apart and keeps us flexible and competitive, as a firm and as individuals. Learning plays a crucial role and that is why at UBS we create an environment where employees can grow and develop. At the center is

our new corporate university – UBS University, a one-stop shop for all learning and development at UBS. Its offering ranges from online and in-person training to help all employees and line managers develop their professional skills, to highly

specialized training and certification programs for specific business areas and support for continuous, lifelong learning. In total, we offer more than 2,400 e-learning and classroom-based trainings.

## Gender distribution by employee category<sup>1</sup>

By headcount, as of 31.12.17	Officers (Director and above)		Officers (other officers)		Employees		Total	
	Number	%	Number	%	Number	%	Number	%
Male	17,986	76	13,046	60	7,129	42	<b>38,161</b>	<b>61</b>
Female	5,651	24	8,716	40	10,030	58	<b>24,397</b>	<b>39</b>
Total	23,637	100	21,762	100	17,159	100	<b>62,558</b>	<b>100</b>

<sup>1</sup> Calculated on the basis that a person (working full time or part time) is considered one headcount (in this table only). This accounts for the total UBS employee number of 62,558 as of 31 December 2017, which excludes staff from UBS Card Center, Hotel Seepark Thun, Wolfsberg and the Widder Hotel.

## Our responsibilities

We aim to be a high-quality employer, with our values embedded in all of our people management practices. We offer competitive benefits to all employees that include insurance, pension, retirement and personal leave. These benefits often go beyond legal requirements or market practice, and we regularly review them to confirm that they meet our employees' needs. For example, in 2017 we enhanced our Family Care Leave policy in the US and Puerto Rico to offer employees four paid weeks of leave per year to care for a relative with a serious health condition. We also increased our paternity leave options in Switzerland in 2017. In addition to the current 10-day paid leave, new fathers can either take up to four weeks of unpaid leave or reduce their workload to 80% for up to six months. At UBS, all new parents can take paid time off after the birth or adoption of a child. Our parental leave policies meet the legal standards in all locations and exceed them in most. We also support flexible working arrangements, including telecommuting, part-time roles, job sharing and partial retirement.

A wide range of resources are available to help employees navigate work-life issues and personal challenges. For example, assistance programs in every region offer support and counseling for challenges such as illness, conflict, bereavement, psychological health and elderly care. In addition, we have redeployment and outplacement programs in every region, as well as clear policies and processes for handling redundancies.

Our Code of Conduct and Ethics (Code) is the basis for all HR policies, guidelines and procedures. It includes a commitment to the health and safety of employees and external staff.

→ Refer to [www.ubs.com/healthandsafety](http://www.ubs.com/healthandsafety) for more information

## Employees have a voice in shaping our culture

We want our employees to be engaged and to share their views on the status quo and our culture. We also want to give them the opportunity to have an impact on the firm's future. Since

2016, we have regularly surveyed all our permanent employees to capture their feedback on how we are doing as a firm. In 2017, we conducted two surveys, in which 74% and 80% of eligible employees, respectively, participated. In both surveys, a significant majority of respondents agreed that they are proud to work at UBS and would recommend the firm to family and friends. They think the firm has a positive work environment and the learning and career opportunities offered are continuously improving for employees at all levels. Our ongoing ambition remains to have a highly motivated workforce that models integrity, collaboration and challenge in their daily work. We also want to be the clear employer of choice in the financial services industry. Our goal is to maintain overall engagement ratings in the top quartile.

## Grievances and whistleblowing protection

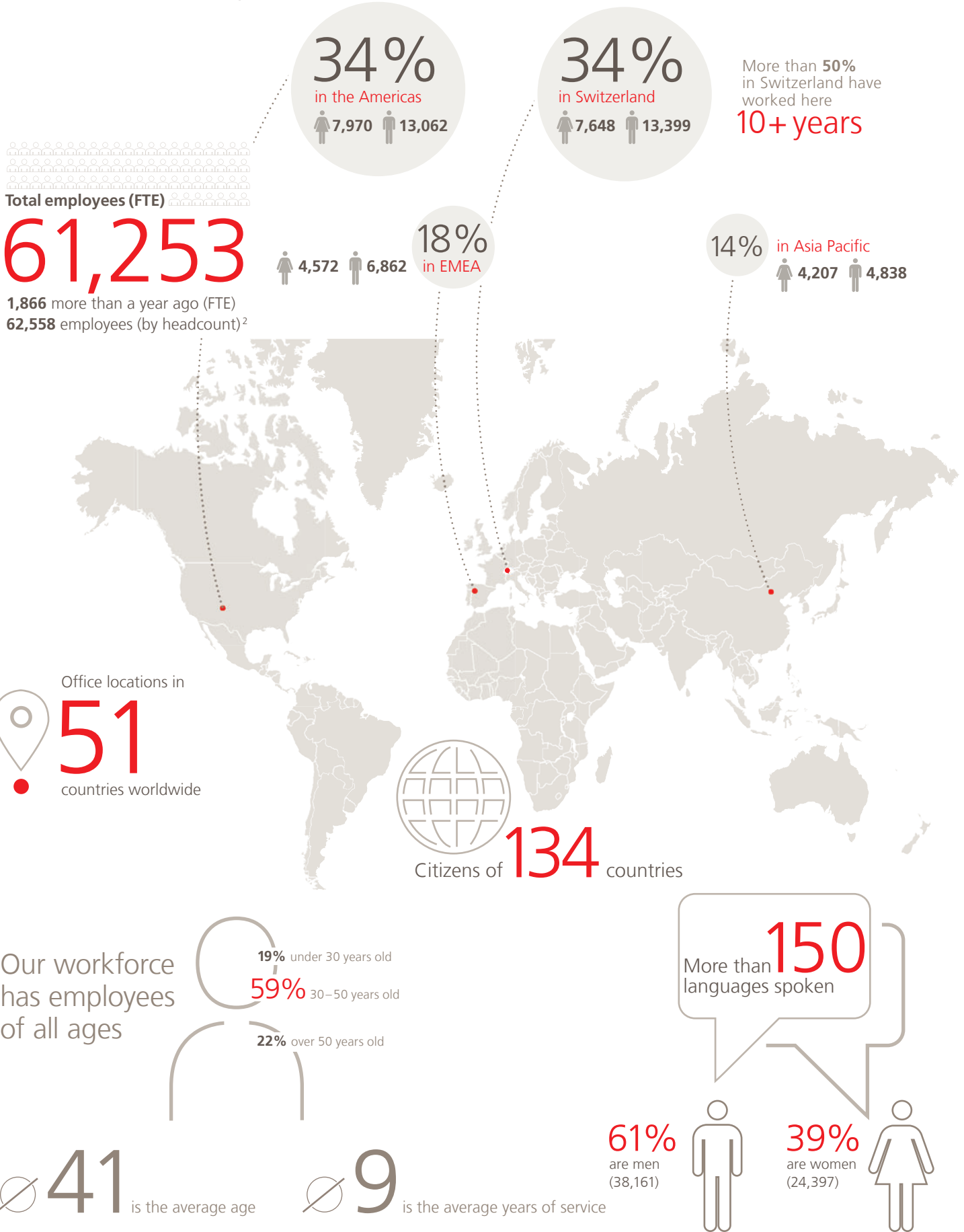
We are committed to maintaining high legal, regulatory and ethical standards. We have long-standing procedures in every region to help us resolve employee grievances, and employees are strongly encouraged to speak with their line manager or HR about any concerns. Our global whistleblowing policy and procedures offer multiple channels for staff to raise concerns, either openly or anonymously, about any suspected breaches of laws, regulations, rules or other legal requirements, or of our Code, policies or professional standards.

→ Refer to the "Risk management and control" section of this report for more information

## Employee representation

As a responsible employer, we maintain an open dialog with our formal employee representation groups, all of which are in Europe. The UBS Employee Forum for Europe represents 16 countries and considers pan-European issues that may affect our performance, operations or prospects. Similar regional and country level groups discuss topics such as business transfers, pensions, workplace conditions, health and safety, and redundancies. Collectively, these groups represent approximately 50% of our global workforce.

Our workforce at a glance <sup>1</sup>



Corporate governance, responsibility and compensation

<sup>1</sup>Calculated as of 31.12.17 on a headcount basis of 62,558 unless specified to be on a full-time equivalent (FTE) basis, where we include proportionate numbers of part-time employees.  
<sup>2</sup>Employees only. In addition, 32,140 external staff (by headcount) were active at the end of 2017 and 2,774 FTEs were employed through third parties on short-term contracts to fill positions on an interim basis.

# Compensation

## Dear shareholders,

The Board of Directors and I wish to thank you for your support at last year's Annual General Meeting and for sharing your views on our compensation practices over the course of the past year.

Throughout 2017, the BoD Compensation Committee continued to oversee the compensation framework and ensure that reward balances performance with prudent risk-taking while also creating alignment with our shareholders and other stakeholders. I am pleased to present our Compensation Report for 2017, which provides further information about our compensation philosophy and approach.

### 2017 performance

We delivered excellent financial results, maintained our strong capital position and achieved our net cost reduction target in 2017.

Our adjusted<sup>1</sup> profit before tax increased 16% to CHF 6.2 billion. Net profit attributable to shareholders was CHF 1.1 billion, compared with CHF 3.2 billion in 2016, as it reflected a CHF 2.9 billion net write-down of deferred tax assets (DTAs). The enactment of the US Tax Cuts and Jobs Act in the fourth quarter of 2017 reduced the tax rate from 35% to 21%, thereby reducing the value of previously recognized US DTAs.

Excluding the DTA write-down, net profit attributable to shareholders would have increased by 22% year over year. The DTA write-down had no impact on our ability to return capital to shareholders and had a negligible impact on fully applied CET1 capital.

We maintained a strong capital position with a fully applied CET1 capital ratio of 13.8% and an improved CET1 leverage ratio of 3.7% while maintaining our post-stress CET1 capital ratio above the 10% objective. The BoD intends to propose a dividend of CHF 0.65 per share, an increase of 8% compared with 2016. In addition, UBS will initiate a share repurchase program of up to CHF 2 billion over three years, commencing with up to CHF 550 million in 2018.

### 2017 performance award pool and expenses

Based on the 2017 Group and business division results, the total performance award management pool was CHF 3.1 billion, an increase of 6% compared with the prior year. The Compensation Committee considers a range of financial factors, including risk-adjusted profit and capital strength, as well as affordability, risk profile and a focus on returns to shareholders, when determining the performance award pool. Revaluations of DTAs do not reflect the underlying performance of the business and are not within management's control; therefore consistent with prior years (when their impact has been positive), they have not affected the funding of the performance award pool.

The Group Executive Board (GEB) performance award pool, including the Group CEO, was CHF 74.2 million, an increase of 3.1%. As a percentage of the adjusted Group profit before tax, the GEB performance award pool was 1.2%, well below the cap of 2.5%.

### 2017 compensation philosophy and framework

Our compensation philosophy aligns the interests of our investors, clients and employees. Our approach to compensation has remained largely unchanged since we introduced our current Total Reward framework in 2012. The consistency of our approach continues to strengthen our culture of sustainable performance, accountability and appropriate risk-taking. In addition, it provides clarity in compensation discussions with our employees as well as with our shareholders.

Our variable compensation includes significant mandatory deferral for employees, thus creating alignment between our employees' and stakeholders' interests and reinforcing that compensation is appropriately linked to longer-term sustainable performance. We believe UBS has one of the most rigorous deferral regimes in the industry with a deferral period over five years, or longer for certain regulated employees.

<sup>1</sup> Please refer to "Group performance" in the "Financial and operating performance" section of this report for more information on adjusted results.



Following the Compensation Committee's review of our principles and framework, enhancements were made to further align our approach with our long-term strategy and shareholder and client interests, as well as to remain competitive and comply with regulatory requirements. For example, to remain competitive, we have raised the cap for immediate cash performance awards to CHF 2 million. With regard to share ownership requirements, we substantially increased the requirements for the Group CEO (1,000,000 shares) and for the other GEB members (500,000 shares).

#### Culture and behaviors

We remain focused on further strengthening our culture to foster and sustain our competitive position. We continue to emphasize behaviors as part of our culture, and we reward not only what results were achieved but also how they were achieved.

We recognize and encourage positive behavior and culture carriers through our Group Franchise Awards (GFA) program, which fosters conduct that exemplifies our Behaviors. The GFA program aims to incentivize the collaboration and cooperation between employees as well as to recognize employees' ideas and suggestions on how to improve processes and efficiency.

Further, we continue to operate a robust Incidents & Consequences process that includes reflecting disciplinary actions and control incidents in deliberations for promotions and performance awards. This includes a multi-year review of incidents to consider behaviors over a longer time horizon.

Our disciplinary approach for violations of our Code of Conduct and Ethics and the incorporation of conduct risk in our operational risk framework demonstrate our commitment to treat each other as well as our clients and counterparties appropriately and to act with integrity in the financial markets.

We consider pay fairness an integral part of our compensation philosophy and we maintain practices designed to achieve appropriate pay across diverse groups, including gender.

#### Annual General Meeting 2018

The BoD and the Compensation Committee appreciate the opportunity to engage with many of our shareholders on compensation matters.

At the Annual General Meeting (AGM) 2018 on 3 May 2018, we will seek your support on the following compensation-related items:



Ann F. Godbehere  
Chair of the Compensation  
Committee of the Board of  
Directors

- the maximum aggregate amount of compensation for the BoD for the period from AGM 2018 to AGM 2019
- the maximum aggregate amount of fixed compensation for the GEB for 2019
- the aggregate amount of variable compensation for the GEB for 2017
- shareholder endorsement in an advisory vote for the Compensation Report

Ann F. Godbehere  
Chair of the Compensation Committee of  
the Board of Directors

## 2017 compensation philosophy

### Total Reward Principles

Our compensation philosophy is to align the interests of our employees with those of our clients and investors, building on our three keys to success – our Pillars, Principles and Behaviors. Our Total Reward Principles establish a framework that balances sustainable performance and prudent risk-taking with a focus on conduct and sound risk management practices.

Our compensation structure is aligned with our strategic priorities. It therefore links the interests of our employees with

those of our stakeholders and encourages our employees to focus on our clients, create sustainable value and achieve the highest standards of performance. Moreover, we reward behavior that helps build and protect the firm's reputation – specifically integrity, collaboration and challenge. We strive for excellence and sustainable performance in everything we do. Compensation for each employee is based on individual, team, business division and Group performance, within the context of the markets in which we operate.

### Our Total Reward Principles

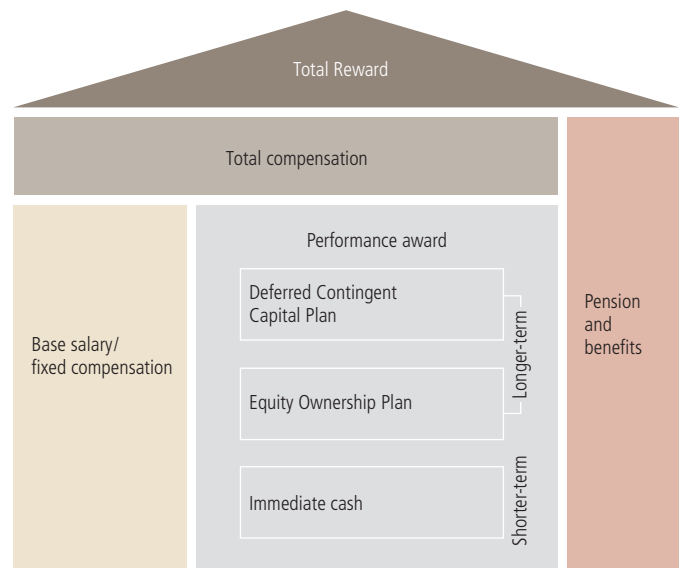
Our Total Reward Principles apply to all employees globally. They may vary in certain locations due to local laws and regulations. The table below provides a summary of our Total Reward Principles.

Attract and engage a diverse, talented workforce	We provide employees with pay that is appropriately balanced between fixed and variable elements, competitive in the market and paid out over an appropriate period
Foster effective individual performance management and communication	Thorough evaluation of individual performance and adherence to our Behaviors, combined with effective communication, ensures there is a direct connection between achievement of business objectives and compensation across the firm
Align reward with sustainable performance	We embrace a culture of integration and collaboration within the firm. Our approach to compensation fosters engagement among employees and serves to align their long-term interests with those of clients and stakeholders
Support appropriate and controlled risk-taking	Compensation is structured such that employees behave in a manner consistent with the firm's risk framework and tolerance, thereby protecting our capital and reputation, and enhancing the quality of our financial results, in line with what our stakeholders expect from us

## Our Total Reward approach

At UBS we have a holistic approach to compensation. Our Total Reward approach consists of fixed compensation (base salary and role-based allowances, if applicable), performance awards (immediate cash performance award and for employees with total compensation exceeding CHF / USD 300,000 Equity Ownership Plan and Deferred Contingent Capital Plan), pension contribution and benefits. Performance awards, where applicable, are determined based on a number of factors, including Group, business division, team and individual performance, and awarded in line with applicable local employment conditions and at the discretion of the firm.

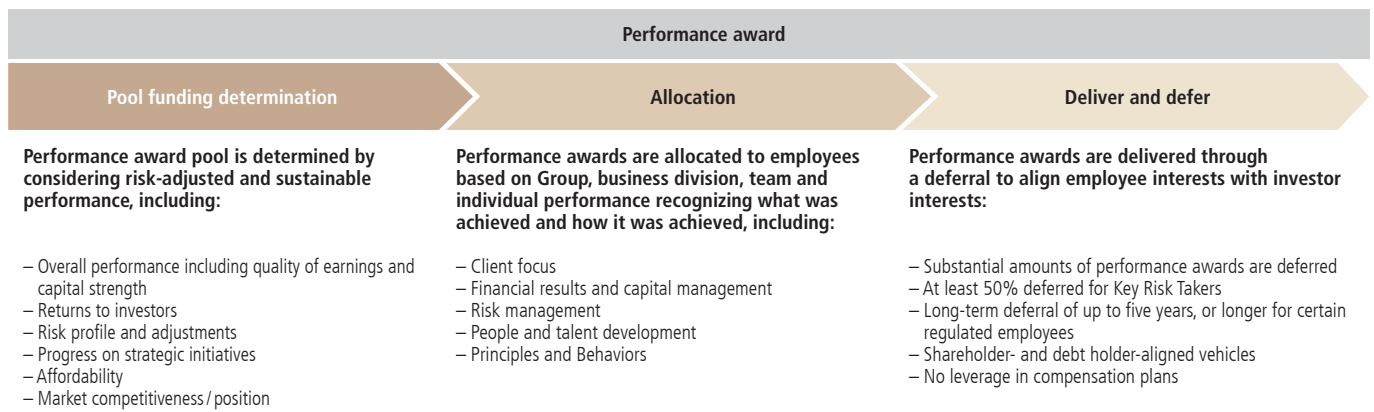
Our Total Reward is structured to support sustainable results. A substantial portion of our performance award is deferred and vests over a period of five years, or longer for certain regulated employees. This deferral regime aligns employee and investor interests, and supports our capital base and the creation of sustainable shareholder value.



Illustrative overview

## Performance award

The performance award process consists of pool funding determination, allocation and delivery and, if applicable, deferral to align reward with sustainable performance as outlined in the chart below. This process also includes additional specific pay-for-performance safeguards for our Group Executive Board (GEB) members.



### Additional GEB pay-for-performance safeguards:

- Cap on individual performance awards and total GEB performance award pool
- Allocations based on a performance assessment considering quantitative and qualitative measures that includes Group / business division and / or region performance including our Pillars, Principles and Behaviors
- Performance assessment includes evaluation by a control function
- At least 80% of awards are at risk of forfeiture
- Cap on immediate cash performance award
- Share ownership requirements
- Six-month notice period in employment contracts
- No hedging strategies allowed
- Binding votes on aggregate GEB compensation
- Advisory vote on the Compensation Report

## 2017 performance and compensation funding

### Our performance in 2017

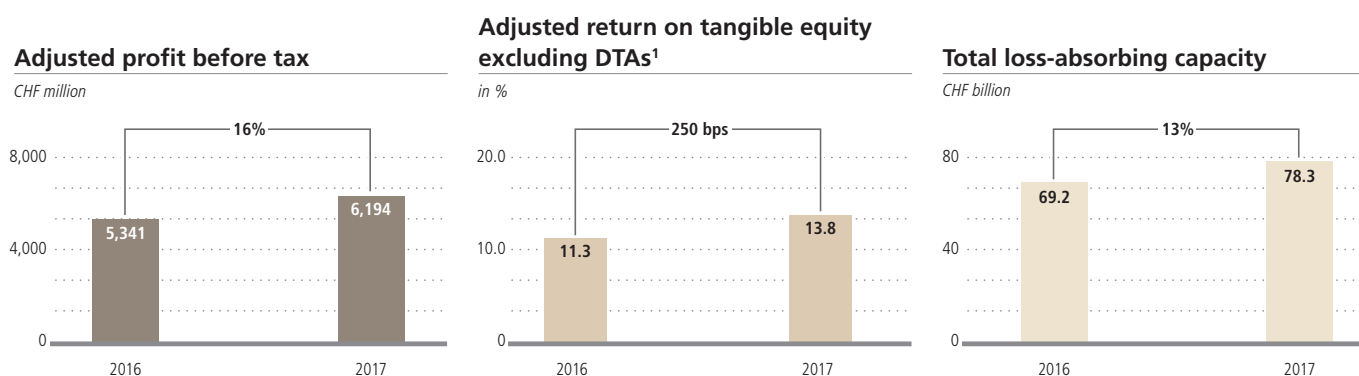
We delivered excellent 2017 financial results. Adjusted<sup>1</sup> profit before tax increased 16% to CHF 6.2 billion and reported profit before tax increased 29% to CHF 5.3 billion, reflecting higher operating income and a reduction in operating expenses. We also achieved our CHF 2.1 billion net cost reduction target while investing for growth.

Net profit attributable to UBS Group AG shareholders was CHF 1.1 billion, and included a CHF 2.9 billion net write-down of deferred tax assets (DTAs) following the enactment of the US Tax Cuts and Jobs Act in the fourth quarter of 2017, which reduced the federal corporate tax rate from 35% to 21%. This resulted primarily in a reduction of the potential future value of previously recognized US tax losses. Excluding this net DTA write-down, net profit attributable to shareholders would have increased 22% to CHF 3.9 billion. Our 2017 adjusted return on tangible equity excluding DTAs was 13.8%.

Our capital position remained strong. As of 31 December 2017, our fully applied common equity tier 1 (CET1) capital ratio remained stable at 13.8% and our fully applied CET1 leverage ratio improved from 3.5% to 3.7%. We increased our fully applied total loss-absorbing capacity by CHF 9.1 billion to CHF 78.3 billion.

For the financial year 2017, the Board of Directors intends to propose a dividend of CHF 0.65 per share, an increase of 8% on the prior year. We will also initiate a share repurchase program of up to CHF 2 billion over the next three years, commencing with up to CHF 550 million in 2018.

<sup>1</sup> Please refer to "Group performance" in the "Financial and operating performance" section of this report for more information on adjusted results.



<sup>1</sup> Calculated as adjusted net profit / loss attributable to shareholders excluding deferred tax expense / benefit, such as the net write-down due to the US Tax Cuts and Jobs Act enacted in the fourth quarter of 2017, divided by average tangible equity attributable to shareholders excluding any DTAs that do not qualify as fully applied CET1 capital.

Our Wealth Management business reported adjusted profit before tax of CHF 2.8 billion, an increase of 15% compared with 2016, driven by increases in all income lines coupled with effective cost control. Net new money was CHF 51.1 billion, reflecting an annual growth rate of 5.2%.

Wealth Management Americas reported adjusted profit before tax of USD 1.3 billion, an increase of 8% compared with 2016. Operating income increased mainly on higher net interest and recurring net fee income. Operating expenses increased mainly due to higher financial advisor compensation reflecting changes announced in 2016 to our compensation model. Strong inflows from same store advisors were more than offset by lower net recruiting, consistent with changes in the operating model, resulting in net new money outflows of USD 7.2 billion.

Personal & Corporate Banking reported adjusted profit before tax of CHF 1.7 billion, a decrease of 4% compared with 2016, mostly due to lower net interest income reflecting the negative rate environment in Switzerland and higher funding costs, as well as higher expenses related to strategic and regulatory initiatives. Net new business volume growth for personal banking was a record 4%.

Our Asset Management business reported adjusted profit before tax of CHF 525 million, a decrease of 5% compared with 2016, primarily reflecting lower operating income. Invested assets reached a nine-year high of CHF 776 billion. Net new money inflows excluding money market flows totaled CHF 48.1 billion for the year.

Adjusted profit before tax in the Investment Bank remained broadly unchanged at CHF 1.5 billion. Lower revenues in Foreign Exchange, Rates and Credit, mainly resulting from reduced client activity due to continued low market volatility, were broadly offset by increased revenue in Equity Capital Markets and in Equity Derivatives. The adjusted return on attributed equity for the Investment Bank was 16%.

Corporate Center reported an adjusted loss before tax of CHF 1.6 billion compared with CHF 2.1 billion in 2016, mainly reflecting reduced expenses.

→ **Refer to “Group performance” in the “Financial and operating performance” section of this report for more information**

### Performance award pool funding

Our performance award pool funding framework is based on business performance, which is measured across multiple dimensions as outlined below.

#### Contribution to create a sustainable shareholder value



We assess Group and business division performance, including achievement against a set of performance targets, and we also consider performance relative to industry peers, general market competitiveness and progress against our strategic objectives, including capital growth as well as risk-weighted assets and cost efficiency. We look at the firm’s risk profile and culture, the extent to which operational risks and audit issues have been identified and resolved, and the success of risk reduction initiatives.

Our compensation philosophy focuses on balancing performance with prudent risk-taking and retaining talented employees. To achieve this, as performance increases, we reduce our overall performance award funding percentage. In years of strong performance, this prevents excessive compensation, resulting in an increased proportion of profit before performance award being available for distribution to shareholders or growing the Group’s capital. In years where performance declines, the performance award pool will generally decrease, however funding rates may increase.

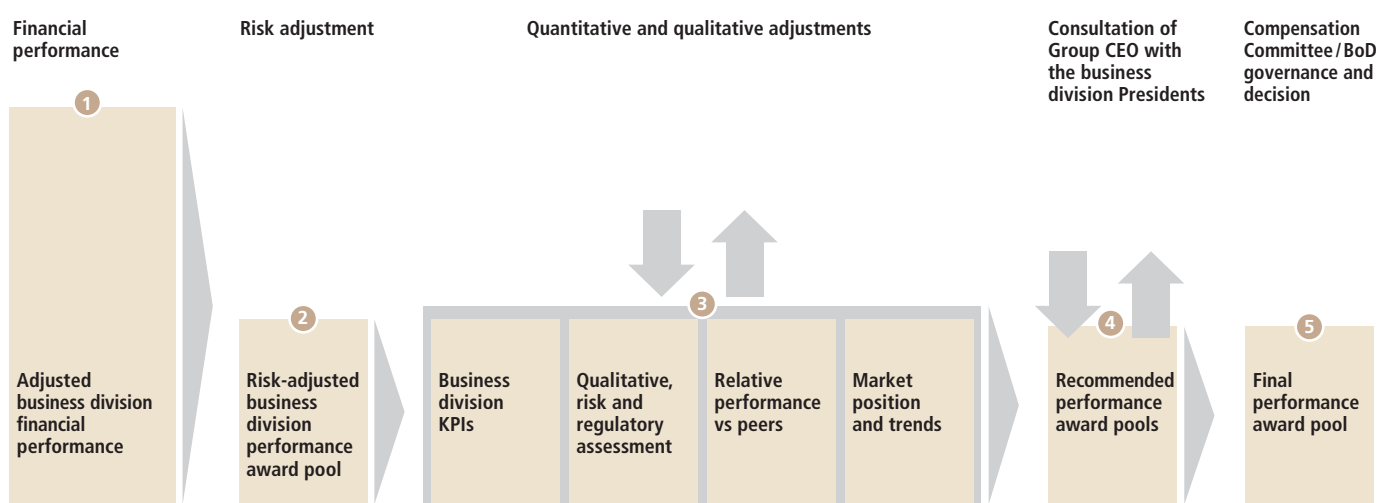
The performance award pool funding process starts with the accrual of a percentage of each business division’s risk-adjusted profit before performance award. In determining the final pool, we also consider progress on our strategic objectives, quality of earnings, affordability, returns to investors and market competitiveness. Business division performance is adjusted for items that do not represent underlying performance (for example gains or losses on the sale of a property or a business). The Compensation Committee may exclude further items,

including litigation and regulatory costs arising from matters that predate current management.

→ Refer to “Group performance” in the “Financial and operating performance” section of this report for more information on adjusted results

An illustrative overview with more details on the process is presented in the chart below.

**Performance award pool funding process – illustrative overview**



- 1 Adjusted business division financial performance** The starting point for the funding process is the adjusted business division financial performance excluding items that are not reflective of the underlying performance

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- 2 Risk-adjusted business division performance award pool** Predetermined business division-specific funding rates are applied to risk-adjusted performance. In addition, credit risk, market risk and operational risk (including conduct) are taken into account

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- 3 Business division KPIs** Each division is assessed based on specific KPIs (e.g., net new money growth rate, return on attributed equity)

**Qualitative, risk and regulatory assessment** Qualitative assessment (e.g., quality of earnings, industry awards), assessment of regulatory compliance and risk assessment (such as legal, compliance, reputational and operational risk) support alignment to our Total Reward Principles

**Relative performance vs peers** Performance is also assessed relative to our peers

**Market position and trends** Market intelligence based on external advisors helps assess the competitiveness of our pay levels and compensation structure. It also provides a prospective view of market trends in terms of absolute compensation levels, compensation framework and industry practice

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- 4 Recommended performance award pools** The business division performance award pool determination process, based on quantitative and qualitative assessments, results in a recommendation from the Group CEO (after consultation with the business division Presidents) to the Compensation Committee for consideration

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- 5 Final performance award pool** The Compensation Committee considers the recommendation in the context of our overall performance, capital strength, risk profile, affordability, returns to investors, progress on strategic initiatives, market competitiveness / position, as well as business and geographic trends. The committee verifies it is in line with our strategy embodied in our Total Reward Principles to create sustainable shareholder value and may alter the recommendations of the Group CEO (upward or downward, including recommending a zero award) before making its final recommendation to the BoD

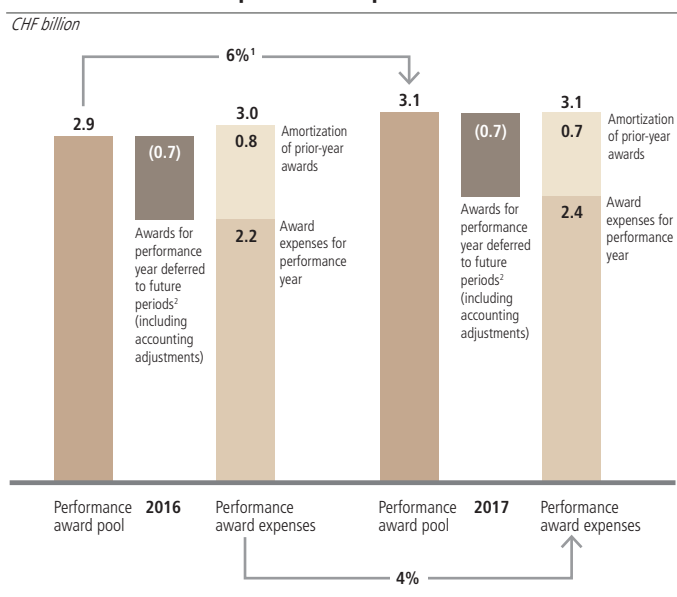
## 2017 performance award pool and expenses

The performance award pool, which includes performance-based variable awards for 2017, was CHF 3.1 billion, reflecting an increase of 6% compared with 2016. Consistent with prior years, where the impact of deferred tax assets (DTA) was positive, the funding of the performance award pool was not affected as DTAs do not reflect the underlying business performance and are not within management's control.

Performance award expenses for 2017 increased by 4% to CHF 3.1 billion. This increase reflects the change in the performance award pool for 2017, partially offset by lower expenses related to the amortization of awards from prior years. The "Performance award pool and expenses" chart on this page compares the performance award pool with performance award expenses.

→ Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information

## Performance award pool and expenses



<sup>1</sup> Excluding employer-paid taxes and social security. <sup>2</sup> Estimate. The actual amount to be expensed in future periods may vary, e.g., due to forfeitures.

## 2017 compensation for the Group CEO and the other GEB members

### Base salary, role-based allowance, pensions and benefits

Each Group Executive Board (GEB) member receives a fixed base salary, which is reviewed annually by the Compensation Committee. The Group CEO's annual base salary for 2017 was CHF 2.5 million and has remained unchanged since his appointment in 2011. The other GEB members received a salary of CHF 1.5 million (or local currency equivalent), also unchanged since 2011.

One GEB member is considered a Material Risk Taker (MRT) in the UK and is in a UK Senior Management Function (SMF). Therefore, he receives a role-based allowance in addition to his base salary. This allowance reflects the market value of this specific role and is only paid while the GEB member is considered an MRT. It consists of a cash portion and a blocked UBS share award, which is granted annually. Such an allowance represents a shift in the compensation mix between fixed and variable compensation and not an increase in total compensation.

Pension contributions and benefits for GEB members are in line with local practices for other employees. No enhanced or supplementary pension contributions are made for the GEB.

At the Annual General Meeting (AGM), shareholders are asked to approve the maximum aggregate amount of fixed compensation for the members of the GEB for the following financial year.

- Refer to the **"Our compensation for employees other than GEB members"** section of this report for more information on MRTs and SMFs
- Refer to the **"Our compensation governance framework"** section of this report for more information on the shareholders' vote on the GEB compensation

### Performance assessment

Annual performance awards for the Group CEO and other GEB members are based on the GEB compensation determination process as illustrated on the next page and, in aggregate, subject to shareholder approval at the AGM.

We assess the GEB members' performance against a number of quantitative and qualitative key performance indicators (KPIs). The quantitative measures for the Group CEO are based on overall Group performance. For other GEB members, they are based on both Group performance and the performance of the relevant business division and / or region; for those who lead Group functions, they are assessed on the performance of the Group and the function they oversee. These quantitative measures together with qualitative measures (Pillars and Principles) account for 65% of the assessment. Behaviors account for 35% of the assessment. The "Overview of the quantitative and qualitative performance assessment measures" table in this section outlines the measures on which the performance assessment is based.

The weighting between Group, business division, regional and functional KPIs varies depending on a GEB member's role. A significant weight is given to Group KPIs for all GEB members.

The performance assessment is the starting point for determining a GEB member's annual performance award. This approach is not mechanical, as the Compensation Committee can exercise its judgment with respect to the performance achieved relative to the prior year, the strategic plan, competitors, and considers the Group CEO's recommendation.

The Compensation Committee's recommendations are then reviewed and must be approved by the BoD. The Compensation Committee, and then the full BoD, follow a similar process in setting the compensation for the Group CEO, except that the Group CEO gives no recommendation on his own award.

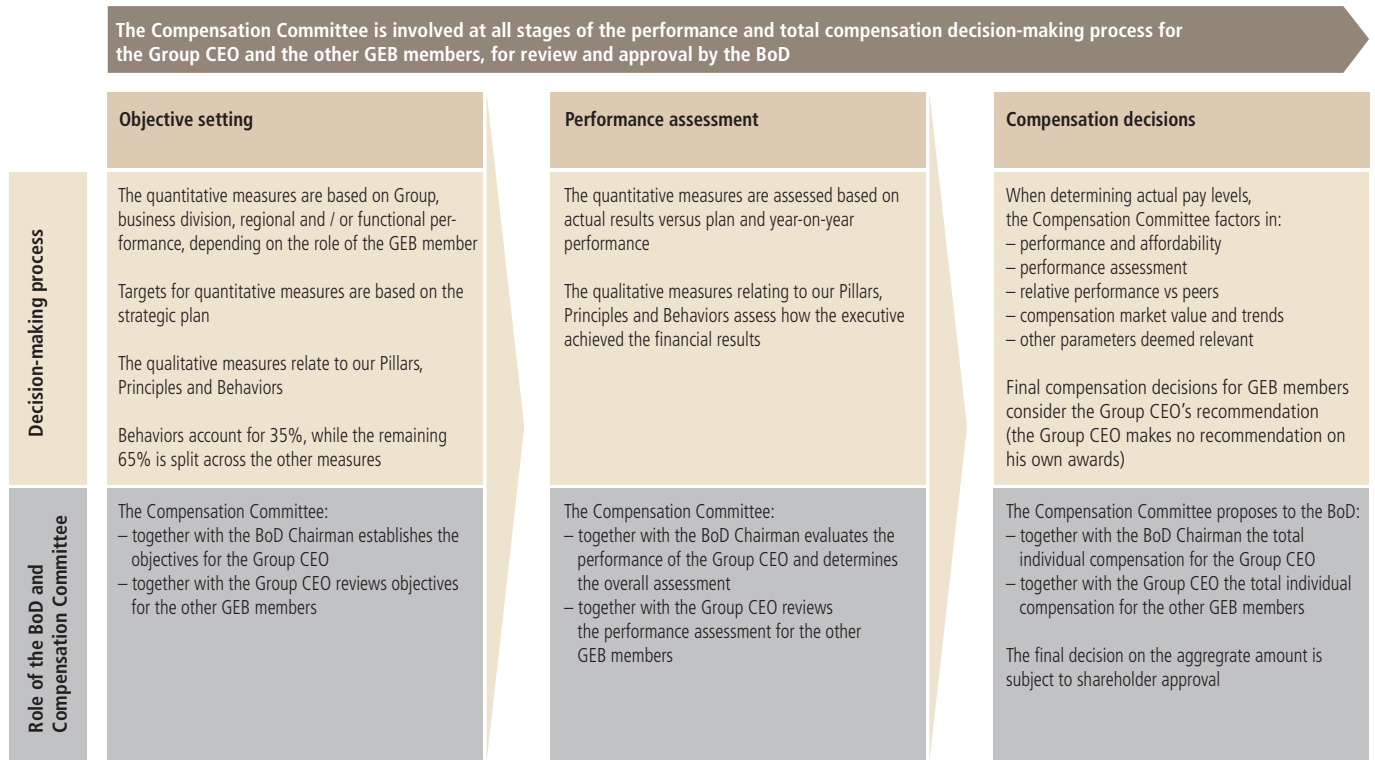
The total amount of the awards for the Group CEO and other GEB members may not exceed 2.5% of adjusted Group profit before tax. Additionally, variable compensation for individual GEB members and the Group CEO may not exceed the specified individual compensation caps, as described later in this section.

The final aggregate performance award for the GEB, including the Group CEO, for a financial year is subject to shareholder approval at the following AGM. The individual variable performance awards for each GEB member will only be confirmed upon shareholder approval at the AGM.



## Overview of the GEB compensation determination process

The compensation for the Group CEO and the other GEB members is governed by a rigorous process under Compensation Committee and BoD oversight. The illustration below shows how compensation for all GEB members is determined.



## Overview of the quantitative and qualitative performance assessment measures

The table below presents the quantitative and qualitative measures for performance assessment of the Group CEO and GEB members.

Quantitative measures		
<b>Group</b>		A range of financial metrics including adjusted Group return on tangible equity, adjusted Group profit before tax, CET 1 targets
<b>Business division, regional and/or functional KPIs (if applicable)<sup>1</sup></b>		Business division and/or regional KPIs vary but may include: net new money growth rate, adjusted divisional/regional profit before tax, adjusted cost/income ratio, net new business volume growth rate, net interest margin, adjusted RoAE, Basel III RWA and LRD expectations  Specific functional KPIs for Corporate Center GEB members
Qualitative measures		
<b>Pillars</b>	Capital strength	Establishes and maintains capital. Generates efficiencies and deploys our capital more efficiently and effectively
	Efficiency and effectiveness	Contributes to the development and execution of our strategy and success across all business lines, functions and regions. Considers market conditions, relative performance and other factors
	Risk management	Reinforces risk management through an effective control framework. Captures the degree to which risks are self-identified and focuses on the individual's success to comply with all the various regulatory frameworks. Helps shape the firm's relationship with regulators through ongoing dialog
<b>Principles</b>	Client focus	Increases client satisfaction and maintains high levels of satisfaction over the long term. This includes promoting collaboration across business divisions and fostering the delivery of the whole firm to our clients
	Excellence	Human Capital Management – develops successors for the most senior positions, facilitates talent mobility within the firm and promotes a diverse and inclusive workforce  Product and Service Quality – strives for excellence in the products and services we offer to our clients
	Sustainable performance	Brand and Reputation – protects the Group's reputation and reinforces full compliance with our standards and principles  Culture – takes a personal role in making Principles and Behaviors front and center of the business requirements. Furthermore, this measure evaluates the individual's ability to reinforce a culture of accountability and responsibility, demonstrating our commitment to be a responsible corporate citizen and to act with integrity in all our interactions with stakeholders
<b>Behaviors</b>	Integrity	Is responsible and accountable for what they say and do; cares about clients, investors, and colleagues; acts as a role model
	Collaboration	Places the interests of clients and the firm before their own and those of their business; works across the firm; respects and values diverse perspectives
	Challenge	Encourages self and others to constructively challenge the status quo; learns from mistakes and experiences

<sup>1</sup> Both regional and functional KPIs may include qualitative measures.

## Benchmarking against peers

When recommending performance awards for the Group CEO and the other GEB members, the Compensation Committee reviews the respective total compensation for each role against the broader market as well as a group of peer companies selected for the comparability of their size, business mix, geographic presence and the extent to which they compete against us for talent. The Compensation Committee also considers our peers' strategies, practices, pay levels and regulatory environment. Overall, the total compensation for a GEB member's specific role considers the compensation paid by our primary peer group for a comparable role and performance.

The Compensation Committee periodically reviews and approves the primary peer group for executive compensation. For 2017, the primary peer group remained unchanged and consisted of:

Bank of America	Credit Suisse	Julius Baer
Barclays	Deutsche Bank	Morgan Stanley
BlackRock	Goldman Sachs	Standard Chartered
BNP Paribas	HSBC	
Citigroup	JPMorgan Chase	

This group is broadened for the purposes of business division benchmarking and for the review of specific roles, as appropriate.

## 2017 deferred performance awards

For each GEB member, at least 80% of the performance award is deferred, while a maximum of 20% can be paid out in the form of immediate cash, which is capped to defer a higher portion and thus further aligns GEB members' and shareholders' interests. To remain competitive, we have revised the cash cap to CHF / USD 2 million (or local currency equivalent) without impacting the overall pay levels for all relevant employees including GEB members. Any amount above this cap is granted in notional shares under the Equity Ownership Plan (EOP). Further we have increased the share ownership requirements for GEB members as explained later in this section.

For the performance year 2017, a minimum of 50% of the overall performance award is granted under the EOP, which vests in three equal installments in years 3 to 5, provided that performance conditions are met.

The remaining 30% of the overall performance award is granted under the Deferred Contingent Capital Plan (DCCP). Under the DCCP, GEB members are awarded notional additional tier 1 (AT1) capital instruments that vest after five years.

The DCCP contributes to the Group's total loss-absorbing capacity, and the awards granted to GEB members are subject to a common equity tier 1 capital ratio write-down trigger of 10%, which is higher than the trigger for other employees and holders of similar debt issued by the UBS Group. Moreover, GEB members forfeit 20% of the granted DCCP award for each year with an adjusted Group loss before tax during the vesting period. This means that 100% of the award is subject to risk of forfeiture.

For the GEB member whose role is considered an SMF, additional provisions apply that are described in the paragraph "UK Senior Managers and Certification Regime".

The Compensation Committee has confirmed that performance conditions for all GEB members' awards due to vest in March 2018 have been satisfied and thus the awards will vest in full.

- Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information
- Refer to the "Our compensation for employees other than GEB members" section of this report for more information on MRTs and SMFs
- Refer to "Vesting of outstanding awards granted in prior years subject to performance conditions" in the "Supplemental information" section of this report for more information

## Share ownership requirements: aligning GEB members' interests with those of our shareholders

To further strengthen the alignment of our GEB members' interests with those of our shareholders, we have substantially increased our share ownership requirements. The revised policy requires the Group CEO to hold a minimum of 1,000,000 UBS shares (up from 500,000) and other GEB members to hold a minimum of 500,000 UBS shares (up from 350,000). GEB members must build up their minimum shareholding within five years from their appointment and retain it throughout their tenure. The total number of UBS shares held by a GEB member consists of any vested or unvested shares and any privately held shares. GEB members may not sell any UBS shares before they reach the aforementioned minimum ownership thresholds. At the end of 2017, the GEB members met these increased share ownership requirements, except for those appointed during 2016, who need to build up and meet the required share ownership level by 2021.

### Caps on the GEB performance award pool

The size of the GEB performance award pool may not exceed 2.5% of the adjusted Group profit before tax. This links overall GEB compensation to the firm's profitability.

For 2017, the Group's adjusted profit before tax was CHF 6.2 billion and the total GEB performance award pool was CHF 74.2 million (CHF 71.9 million in 2016). The performance award pool as a percentage of adjusted Group profit before tax was 1.2%, which is well below the cap of 2.5%.

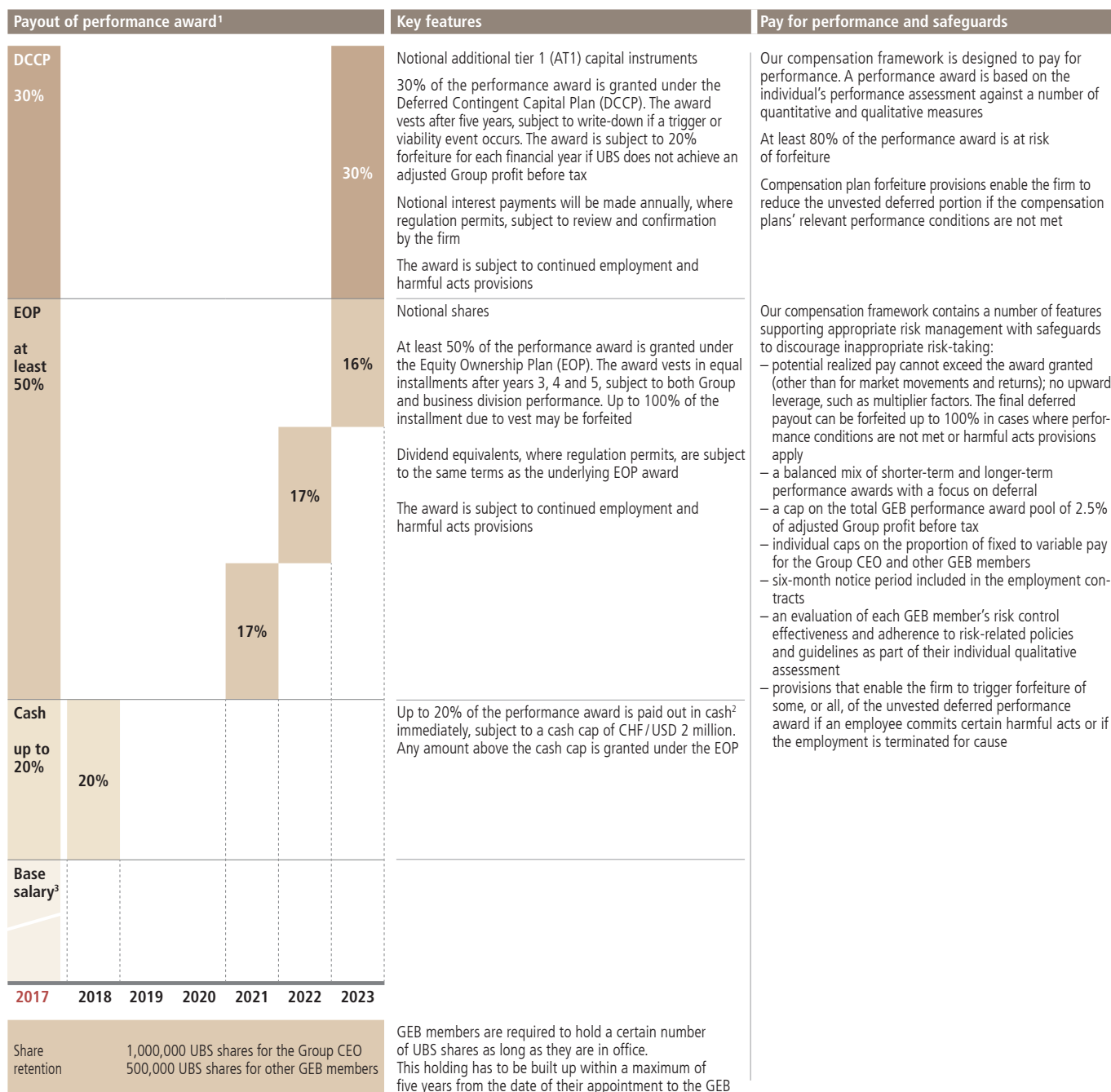
In line with the individual compensation caps introduced in 2013 on the proportion of fixed pay to variable pay for all GEB members, the Group CEO's performance award is capped at five times his fixed compensation. Performance awards of other GEB members are capped at seven times their fixed compensation (or two times for the GEB member who is also an MRT). For 2017, performance awards for GEB members and the Group CEO were, on average, 3.5 times their fixed compensation (excluding benefits and contributions to retirement benefit plans).

### Employment contracts

The employment contracts of the GEB members do not include severance terms, sometimes referred to as golden parachutes, or supplementary pension plan contributions. All employment contracts for GEB members are subject to a notice period of six months. A GEB member leaving the firm before the end of a performance year may be considered for a performance award based on their contribution during that performance year and in line with the approach described in this report. Such awards are subject to approval of the BoD, which may decide not to grant any awards.

## 2017 compensation framework for GEB members

Up to 20% of the annual performance award is paid in the form of immediate cash and at least 80% will be deferred over a period of five years<sup>1</sup>, with at least 50% granted under the EOP and the remaining 30% under the DCCP. The chart below is an illustrative example.



<sup>1</sup> Senior Management Functions have extended deferral periods, with the deferred performance awards vesting in equal installments between years 3 and 7. <sup>2</sup> UK Material Risk Takers receive 50% in form of blocked shares. <sup>3</sup> May include role-based allowances that have been made in line with market practice in response to regulatory requirements.

### 2017 compensation for the Group Chief Executive Officer

The performance award for the Group CEO, Sergio Ermotti, is based on the achievement of both quantitative and qualitative performance targets as described earlier in this section. These targets were set to reflect the strategic priorities determined by the Chairman and the BoD, including risk-adjusted profitability, capital position and adjusted return on tangible equity, as well as a range of qualitative measures to assess the quality and sustainability of the performance. Quantitative and qualitative measures account for 65% of Mr. Ermotti's performance assessment while the remaining 35% is based on behavioral measures. The table on the following page summarizes the metrics used to assess Mr. Ermotti's performance as Group CEO for 2017.

The BoD recognized that under Mr. Ermotti's continuing strong leadership, the Group delivered excellent financial results, maintained its strong capital position and successfully concluded the CHF 2.1 billion net cost reduction program. Overall performance exceeded plan despite significant market headwinds, including low market volatility, negative interest rate environment and high funding costs.

Adjusted<sup>1</sup> profit before tax increased by 16% to CHF 6.2 billion and net profit attributable to UBS Group AG shareholders was CHF 1.1 billion, including a CHF 2.9 billion net write-down of deferred tax assets (DTAs) following the enactment of the US Tax Cuts and Jobs Act in the fourth quarter of 2017. Excluding this DTA write-down, net profit attributable to shareholders would have increased by 22% to CHF 3.9 billion. UBS's adjusted return on tangible equity for 2017 was 13.8% excluding the effects of deferred tax expense / benefit and DTAs.

The BoD also considered Mr. Ermotti's focus on maintaining UBS's capital position with a fully applied CET1 capital ratio of 13.8%, above our 13% target, and an improved fully applied CET1 leverage ratio of 3.7%, ahead of the Swiss systemically relevant bank fully-applied requirement of 3.5% as of 1 January 2020. Further, he also maintained our post-stress CET1 capital ratio above the 10% objective, and optimized capital usage by business divisions and legal entities. Under Mr. Ermotti's stewardship, the Group increased its total loss-absorbing capacity to CHF 78.3 billion.

The BoD also acknowledged Mr. Ermotti's strong performance relative to qualitative goals in 2017, including overseeing the delivery of significant cost savings while at the same time the bank is investing in technology and innovative platforms to drive growth in the future and differentiate our business in the digital age.

Mr. Ermotti continued to promote talent development and effectively led initiatives which have improved internal and particularly cross divisional mobility. He continued to improve diversity at senior levels toward our long term aspiration to increase the ratio of women in management roles to one-third. In addition, Mr. Ermotti continues to successfully drive the organization to be client-centric and focus on increased client satisfaction. Aligned with this priority, he demonstrated a strong personal commitment and engagement to deliver innovative and high quality client services and products.

The BoD recognizes Mr. Ermotti's clear tone from the top in setting and demanding the highest standards with respect to both a strong risk culture and behaviors. Sustained progress has been achieved in further anchoring our culture and behavior program across the firm, and Mr. Ermotti successfully spearheaded initiatives to promote cross-business engagement and collaboration, and support a culture where constructive challenge is embraced and encouraged.

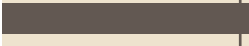

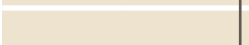
Reflecting his achievements in 2017, the BoD approved the proposal by the Compensation Committee to grant Mr. Ermotti a performance award of CHF 11.4 million, bringing his total compensation for the year (excluding benefits and contributions to his retirement benefit plan) to CHF 13.9 million. The performance award is subject to shareholder approval as part of the aggregate GEB 2017 variable compensation and will be delivered with 52% deferred in EOP over years 3 to 5 and 30% in DCCP after 5 years, subject to the achievement of certain performance and other forfeiture conditions. The remaining 18% (CHF 2 million) will be delivered in immediate cash.

→ **Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information**

<sup>1</sup> Please refer to "Group performance" in the "Financial and operating performance" section of this report for more information on adjusted results.

## Performance assessment for the Group CEO

The chart below illustrates the 2017 assessment of the Group CEO performance. For additional details on the assessment, please refer to the description on the previous page.

Weightings	Quantitative measures	2016 results	2017 results	Assessment Vs Plan
				100%
65%	<b>Adjusted Group profit before tax</b>	CHF 5,341 million	CHF 6,194 million	
	<b>Adjusted Group return on tangible equity excluding DTAs<sup>1</sup></b>	11.3%	13.8%	
	<b>Capital management</b> CET1 capital ratio, fully applied CET1 leverage ratio, fully applied Post-stress CET1 ratio, fully applied <sup>2</sup>	13.8% 3.53% >10%	13.8% 3.69% >10%	
	<b>Qualitative measures</b>	<b>Achievements</b>		
	<b>Pillars</b> Capital Strength Efficiency and Effectiveness Risk Management	Overall performance met expectations, given: <ul style="list-style-type: none"> <li>– Maintained strong capital position and achieved capital ratios while optimizing usage by business divisions and legal entities</li> <li>– Performance exceeded plan despite significant market headwinds, including low market volatility, negative interest rate environment and high funding costs</li> <li>– Delivery of significant cost savings while at the same time the bank is investing in technology and innovative platforms to drive growth in the future and differentiate its business in the digital age</li> </ul>		
	<b>Principles</b> Client Focus Excellence Sustainable Performance	Overall performance exceeded expectations, given: <ul style="list-style-type: none"> <li>– Promoted talent development and led initiatives to improve internal and cross divisional mobility</li> <li>– Continued to improve diversity at senior levels</li> <li>– Successfully drives the organization to be client-centric and focus on increased client satisfaction, strong personal commitment and engagement to deliver innovative and high quality client services and products</li> </ul>		
35%	<b>Behaviors</b> Integrity Collaboration Challenge	Overall performance exceeded expectations, given clear tone from the top and: <ul style="list-style-type: none"> <li>– Set and demanded the highest standards with respect to both a strong risk culture and behaviors</li> <li>– Sustained progress in further anchoring the culture and behavior program across the firm</li> <li>– Spearheaded initiatives to further promote cross-business engagement and collaboration, and support a culture where constructive challenge is embraced and encouraged</li> </ul>		

<sup>1</sup> Calculated as adjusted net profit/loss attributable to shareholders excluding deferred tax expense/benefit, such as the net write-down due to the US Tax Cuts and Jobs Act enacted in the fourth quarter of 2017, divided by average tangible equity attributable to shareholders excluding any DTAs that do not qualify as fully applied CET1 capital. <sup>2</sup> CET1 post-stress objective is to maintain ratio above 10%.

**Total compensation for GEB members for the performance year 2017**

The GEB performance awards are subject to approval by the BoD based on the assessment of quantitative and qualitative performance measures and, in aggregate, subject to shareholder approval. The aggregate performance award pool for the GEB

was CHF 74.2 million for 2017, an increase of 3.1% compared with the prior year. This increase of 3.1% compares with a 16% increase in adjusted profit before tax and a 6% increase in the overall performance award pool of the firm.

At the AGM 2018, shareholders will vote on the aggregate 2017 total variable compensation for the GEB.

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**Total compensation for GEB members**

CHF, except where indicated<sup>1</sup>

Name, function	For the year	Base salary <sup>2</sup>	Contribution to retirement benefit plans <sup>3</sup>	Benefits <sup>4</sup>	Total fixed compensation	Immediate cash <sup>5</sup>	Annual performance award under EOP <sup>6</sup>	Annual performance award under DCCP <sup>7</sup>	Total variable compensation	Total fixed and variable compensation <sup>8</sup>
Sergio P. Ermotti, Group CEO (highest-paid)	2017	2,500,000	261,181	41,261	2,802,442	2,000,000	5,980,000	3,420,000	11,400,000	14,202,442
Sergio P. Ermotti, Group CEO (highest-paid)	2016	2,500,000	261,181	42,577	2,803,758	1,000,000	6,630,000	3,270,000	10,900,000	13,703,758
Aggregate of all GEB members <sup>9,10,11</sup>	2017	21,459,305	2,439,414	1,842,848	25,741,566	14,550,000	37,355,000	22,245,000	74,150,000	99,891,566
	2016	21,601,925	2,387,649	1,977,703	25,967,277	11,289,350	39,040,650	21,570,000	71,900,000	97,867,277

<sup>1</sup> Local currencies have been translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report, or at the performance award currency exchange rate. <sup>2</sup> Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). <sup>3</sup> Includes the portion related to the employer's contribution to the statutory pension scheme. <sup>4</sup> All benefits are valued at market price. <sup>5</sup> In accordance with the remuneration section of the UK Prudential Regulation Rulebook, the immediate cash includes blocked shares for one GEB member. <sup>6</sup> For EOP awards for the performance year 2017, the number of shares has been determined by dividing the amount by CHF 17.999 or USD 19.234, the average closing price of UBS shares over the last ten trading days in February 2017. For EOP awards for the performance year 2016, the number of shares was determined by dividing the amount by CHF 15.75 or USD 15.67, the average closing price of UBS shares over the last ten trading days in February 2016. Starting with performance year 2017, the GEB member who is also an MRT is no longer permitted to receive dividend payments on EOP awards. Accordingly the number of shares for this GEB member was determined by dividing the amount by the share price used for other EOP awards, adjusted for the expected dividend yield over the vesting period, which represents the fair value of the non-dividend bearing awards. <sup>7</sup> The amounts reflect the amount of the notional additional tier 1 (AT1) capital instrument excluding future notional interest. For DCCP awards for the performance year 2017, the notional interest rate is set at 5.85% for awards denominated in US dollars and 2.30% for awards denominated in Swiss francs. For DCCP awards for the performance year 2016, the notional interest rate is set at 5.95% for awards denominated in US dollars and 2.55% for awards denominated in Swiss francs. Starting with performance year 2017, the GEB member who is also an MRT is no longer permitted to receive interest payments on DCCP awards. Accordingly the amounts reflect the fair value of the granted non-interest bearing awards. <sup>8</sup> Excludes the portion related to the legally required employer's social security contributions for 2017 and 2016, which are estimated at grant at CHF 5,181,559 and CHF 5,131,867, respectively, of which CHF 893,257 and CHF 856,796, respectively, for the highest-paid GEB member. The legally required employees' social security contributions are included in the amounts shown in the table above, as appropriate. <sup>9</sup> Twelve GEB members were in office on 31 December 2017 and on 31 December 2016. <sup>10</sup> 2016 includes compensation for Lukas Gähwiler for eight months in office as a GEB member. <sup>11</sup> Excludes salaries and employer's contribution paid for 2016 to the statutory pension scheme and benefits as part of the employment contract during the notice period of CHF 1,753,997 for two GEB members who stepped down on 31 December 2015. No such payments were made in 2017.

**Fixed and variable compensation for GEB members<sup>1</sup>**

CHF million, except where indicated	Total for the year ended 2017		Not deferred		Deferred <sup>2</sup>		Total for the year ended 2016
	Amount	%	Amount	%	Amount	%	Amount
<b>Total compensation</b>							
Amount <sup>3</sup>	96	100	36	38	60	62	94
Number of beneficiaries	12						13
<b>Fixed compensation<sup>3,4</sup></b>	21	22	21	100	0	0	22
Cash-based	20	21	20		0		20
Equity-based	2	2	2		0		2
<b>Variable compensation</b>	74	78	15	20	60	80	72
Immediate cash <sup>5</sup>	15	15	15		0		11
Equity Ownership Plan (EOP) <sup>6</sup>	37	39	0		37		39
Deferred Contingent Capital Plan (DCCP) <sup>6</sup>	22	23	0		22		22

<sup>1</sup> The figures relate to all GEB members in office in 2017. <sup>2</sup> Based on the specific plan vesting and reflecting the total award value at grant, which may differ from the accounting expenses. <sup>3</sup> Excludes benefits and employer's contribution to retirement benefit plans. <sup>4</sup> Includes base salary and role-based allowances, rounded to the nearest million. <sup>5</sup> Includes allocation of vested but blocked shares, in line with the remuneration section of the UK Prudential Regulation Authority Rulebook. <sup>6</sup> For the GEB member who is also an MRT, the awards starting with performance year 2017 are no longer permitted to include dividend and interest payments. Accordingly the amounts reflect for EOP the fair value of the non-dividend bearing awards and for DCCP the fair value of the granted non-interest bearing awards.



# 2017 compensation for the Board of Directors

## Chairman of the BoD

Under the leadership of the Chairman, Axel A. Weber, the Board of Directors (BoD) determines, among other things, the strategy for the Group based on recommendations by the Group CEO, exercises ultimate supervision over management and appoints all Group Executive Board (GEB) members.

The Chairman presides over all general meetings of shareholders and the BoD, and works with the committee chairpersons to coordinate the work of all BoD committees. Together with the Group CEO, the Chairman is responsible for effective communication with shareholders and other stakeholders, including government officials, regulators and public organizations. This is in addition to establishing and maintaining a close working relationship with the Group CEO and other GEB members, and providing advice and support when appropriate, as well as continuing to strengthen and promote our culture through the three keys to success – our Pillars, Principles and Behaviors.

The Chairman's total compensation is contractually fixed at CHF 5.7 million, excluding benefits and pension fund contributions. His total compensation for 2017, which is unchanged from last year, consisted of a cash payment of CHF 3.5 million and a share component of CHF 2.2 million delivered in 122,229 UBS shares at CHF 17.999 per share. The shares are blocked from distribution for four years. Accordingly, his total reward, including benefits and pension fund contributions for his service as Chairman for the full year 2017, was CHF 6,033,565.

→ **Refer to "Board of Directors" in the "Corporate governance" section of this report for more information on the responsibilities of the Chairman**

The share component aligns the Chairman's pay with the Group's long-term performance. The Chairman's employment agreement does not provide for severance terms or supplementary contributions to pension plans. Benefits for the Chairman are in line with local practices for UBS employees. The Compensation Committee approves the Chairman's compensation annually, taking into consideration fee or compensation levels for comparable roles outside the firm.

## Independent BoD members

All BoD members except the Chairman are deemed independent directors and receive a fixed base fee of CHF 325,000 per annum. In addition to the base fee, independent BoD members receive committee retainers for their services on the firm's various board committees. The Senior Independent Director and the Vice Chairman of the BoD each receive an additional retainer of CHF 250,000. Independent BoD members must use a minimum of 50% of their fees to purchase UBS shares that are blocked for four years. They may elect to use up to 100% of their fees to purchase blocked UBS shares. In all cases, the number of shares that independent BoD members are entitled to purchase is calculated at a discount of 15% below the average closing price over the last 10 trading days in February. Independent BoD members do not receive performance awards, severance payments or benefits. The chart on the following page provides details and additional information on the remuneration framework for independent BoD members.

Base fees, committee retainers and any other payments to be received by independent BoD members are subject to an annual review based on a proposal submitted by the Chairman of the BoD to the Compensation Committee, which in turn submits a recommendation to the BoD for approval. The BoD proposes at each Annual General Meeting (AGM) for shareholder approval the aggregate amount of BoD remuneration, including compensation of the Chairman, which applies until the subsequent AGM.

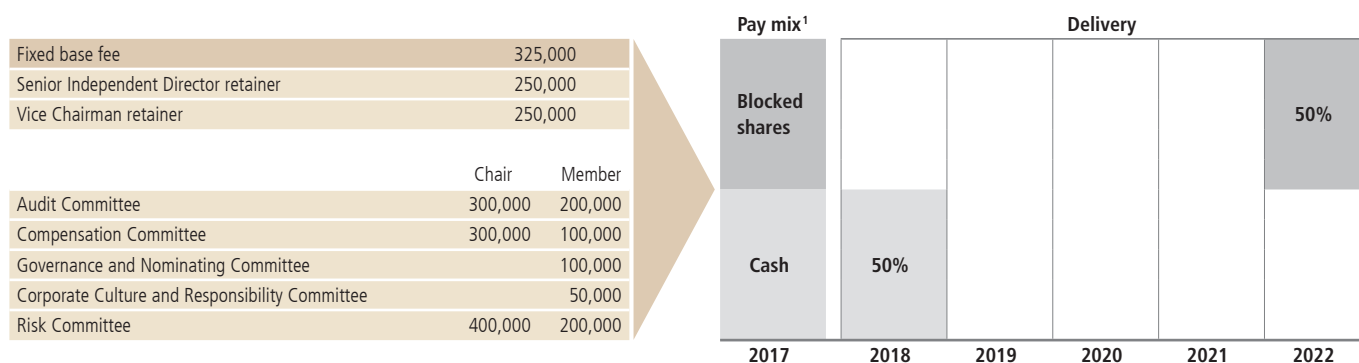
The "Remuneration details and additional information for independent BoD members" table shows the remuneration for each independent BoD member for the period from AGM 2017 to AGM 2018. The fixed base fees are unchanged from the 2016 / 17 period.

Corporate governance, responsibility and compensation  
Compensation

## 2017 / 2018 remuneration framework for independent BoD members

CHF, except where indicated

Fees include retainers for committee chair or membership and / or specific roles that are paid per annum. At least 50% of the total amounts must be used to purchase shares that are blocked for four years.



<sup>1</sup> Independent BoD members can elect to use 100% of their remuneration to purchase blocked UBS shares. UBS blocked shares are granted with a price discount of 15% and are blocked for four years.

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### Total payments to BoD members

CHF, except where indicated

	For the year	Total <sup>1</sup>
Aggregate of all BoD members	2017	13,133,565
	2016	13,219,569

<sup>1</sup> Includes social security contributions paid by the BoD members but excludes the portion related to the legally required social security contributions paid by UBS, which for 2017 is estimated at grant at CHF 664,074 and for 2016 at CHF 662,740.

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### Compensation details and additional information for non-independent BoD members

CHF, except where indicated

Name, function <sup>1</sup>	For the year	Base salary	Annual share award <sup>2</sup>	Benefits <sup>3</sup>	Contributions to retirement benefit plans <sup>4</sup>	Total <sup>5</sup>
Axel A. Weber, Chairman	2017	3,500,000	2,200,000	72,384	261,181	6,033,565
	2016	3,500,000	2,200,000	108,388	261,181	6,069,569

<sup>1</sup> Axel A. Weber was the only non-independent member in office on 31 December 2017 and on 31 December 2016, respectively. <sup>2</sup> These shares are blocked for four years. <sup>3</sup> Benefits are all valued at market price. <sup>4</sup> Includes the portion related to UBS's contribution to the statutory pension scheme. <sup>5</sup> Excludes the portion related to the legally required social security contributions paid by UBS, which for 2017 is estimated at grant at CHF 367,999 and for 2016 at CHF 368,695. The legally required social security contributions paid by the non-independent BoD members are included in the amounts shown in this table, as appropriate.

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## Remuneration details and additional information for independent BoD members

CHF, except where indicated

Name, function <sup>1</sup>	Audit Committee	Compensation Committee	Corporate Culture and Responsibility Committee	Governance and Nominating Committee	Risk Committee	For the period	Base fee	Committee retainer(s)	Additional payments <sup>2</sup>	Total <sup>3</sup>	Share percentage <sup>4</sup>	Number of shares <sup>5,6</sup>
						AGM to AGM						
Michel Demaré, Vice Chairman	M	M				2017/2018	325,000	400,000	250,000	975,000	50	31,864
	M	M				2016/2017	325,000	400,000	250,000	975,000	50	36,407
David Sidwell, Senior Independent Director				M	C	2017/2018	325,000	500,000	250,000	1,075,000	50	35,133
				M	C	2016/2017	325,000	500,000	250,000	1,075,000	50	40,141
Reto Francioni, member		M	M		M	2017/2018	325,000	350,000		675,000	50	22,060
		M	M		M	2016/2017	325,000	350,000		675,000	50	25,205
Ann F. Godbehere, member	M	C				2017/2018	325,000	500,000		825,000	50	26,962
	M	C				2016/2017	325,000	500,000		825,000	50	30,806
William G. Parrett, member	C	M	M			2017/2018	325,000	450,000		775,000	50	25,328
	C	M	M			2016/2017	325,000	450,000		775,000	50	28,939
Julie G. Richardson, member					M	2017/2018	325,000	200,000		525,000	50	17,157
						2016/2017	–	–		–	–	–
Isabelle Romy, member	M			M		2017/2018	325,000	300,000		625,000	50	20,426
	M			M		2016/2017	325,000	300,000		625,000	50	23,338
Robert W. Scully, member					M	2017/2018	325,000	200,000		525,000	50	17,157
					M	2016/2017	325,000	200,000		525,000	100	29,917
Beatrice Weder di Mauro, member	M		M			2017/2018	325,000	250,000		575,000	50	18,792
	M				M	2016/2017	325,000	400,000		725,000	50	27,072
Dieter Wemmer, member					M	2017/2018	325,000	200,000		525,000	50	17,157
					M	2016/2017	215,000	160,000		375,000	50	14,002
Joseph Yam, former member						2017/2018	–	–		–	–	–
			M		M	2016/2017	325,000	250,000		575,000	50	21,471
<b>Total 2017/2018</b>										<b>7,100,000</b>		
<b>Total 2016/2017</b>										<b>7,150,000</b>		

Legend: C = Chairperson of the respective Committee, M = Member of the respective Committee

<sup>1</sup> Ten independent BoD members were in office on 31 December 2017. Julie G. Richardson was elected and Joseph Yam stepped down at the AGM on 4 May 2017. Ten independent BoD members were in office on 31 December 2016. On Dieter Wemmer's request, his remuneration had been reduced to account for his meeting attendance as he faced a number of scheduling conflicts in 2016. <sup>2</sup> These payments are associated with the Vice Chairman or the Senior Independent Director function. <sup>3</sup> Excludes UBS's portion related to the legally required social security contributions, which for the period from the AGM 2017 to the AGM 2018 is estimated at CHF 296,075 and which for the period from the AGM 2016 to the AGM 2017 was estimated at CHF 294,045. The legally required social security contributions paid by the independent BoD members are included in the amounts shown in this table, as appropriate. <sup>4</sup> Fees are paid 50% in cash and 50% in blocked UBS shares. However, independent BoD members may elect to have 100% of their remuneration paid in blocked UBS shares. <sup>5</sup> For 2017, UBS shares, valued at CHF 17.999 (average closing price of UBS shares at the SIX Swiss Exchange over the last 10 trading days of February 2018), were granted with a price discount of 15%. These shares are blocked for four years. For 2016, UBS shares, valued at CHF 15.75 (average closing price of UBS shares at the SIX Swiss Exchange over the last 10 trading days of February 2017), were granted with a price discount of 15%. These shares are blocked for four years. <sup>6</sup> Number of shares is reduced in case of the 100% election to deduct legally required contributions. All remuneration payments are, where applicable, subject to social security contributions and / or withholding tax.

## Our compensation governance framework

### Board of Directors and Compensation Committee

The Board of Directors (BoD) is ultimately responsible for approving and overseeing the compensation strategy proposed by the Compensation Committee, which determines compensation-related matters in line with the principles set forth in the Articles of Association.

As determined in the Articles of Association and the firm's Organization Regulations, the Compensation Committee supports the BoD in its duties to set guidelines on compensation and benefits, to approve certain compensation and to scrutinize executive compensation. It is responsible for the governance and oversight of our compensation process and practices, including considering the alignment between pay and performance and that our compensation system does not encourage inappropriate risk-taking. Our Compensation Committee consists of four independent BoD members who are elected annually by the shareholders at the Annual General Meeting (AGM).

Among other responsibilities, the Compensation Committee, on behalf of the BoD:

- reviews our Total Reward Principles
- reviews and approves the design of the compensation framework
- reviews performance award funding throughout the year and proposes the final performance award pool to the BoD for approval
- together with the Group CEO, reviews performance targets and performance assessments and proposes base salaries and annual performance awards for the other Group Executive Board (GEB) members to the BoD, which approves the total compensation of each GEB member
- together with the Chairman of the BoD, establishes performance targets, evaluates performance and proposes the compensation for the Group CEO to the BoD
- approves the total compensation for the Chairman of the BoD
- together with the Chairman, proposes the total individual compensation for independent BoD members for approval by the BoD
- together with the BoD, proposes the maximum aggregate amounts of compensation for the BoD and for the GEB, to be submitted for approval by shareholders at the AGM
- reviews the compensation report and approves any material public disclosures on compensation matters

The Compensation Committee meets at least four times a year. In 2017, the Compensation Committee held seven meetings and two conference calls. All meetings were fully attended. The

Chairman of the BoD and the Group CEO attended all meetings and calls. The Chairman of the BoD and the Group CEO were not present during discussions related to their own compensation or performance evaluations. The Chairperson of the Compensation Committee may also invite other executives to join the meeting in an advisory capacity. No individual whose compensation is reviewed is allowed to attend meetings during which specific decisions are made about their compensation. Such decisions are subject to approval of the Compensation Committee and the BoD.

After the meetings, the Chairperson of the Compensation Committee reports to the BoD on the activities of the Compensation Committee and the matters discussed. In addition, where necessary, the Chairperson submits proposals for approval by the full BoD. The minutes of Compensation Committee meetings are sent to all members of the BoD.

On 31 December 2017, the Compensation Committee members were Ann F. Godbehere, who chairs the committee, Michel Demaré, Reto Francioni and William G. Parrett.

### External advisors

The Compensation Committee may retain external advisors to support it in fulfilling its duties. In 2017, HCM International Ltd. provided independent advice on compensation matters. HCM International Ltd. holds no other mandates with UBS. The compensation consulting firm Willis Towers Watson provided the Compensation Committee with data on market trends and benchmarks, including in relation to GEB and BoD compensation. Various subsidiaries of Willis Towers Watson provide similar data to Human Resources in relation to compensation for employees below the BoD and GEB level. Willis Towers Watson holds no other compensation-related mandates with UBS.

### The Risk Committee's role in compensation

The Risk Committee, a committee of the BoD, works closely with the Compensation Committee to reinforce that our approach to compensation reflects proper risk management and control. The Risk Committee supervises and sets appropriate risk management and risk control principles and receives regular briefings on how risk is factored into the compensation process. It also monitors Group Risk Control's involvement in compensation and reviews risk-related aspects of the compensation process.

→ Refer to [www.ubs.com/governance](http://www.ubs.com/governance) for more information

## Compensation Committee 2017 / 2018 key activities and timeline

This table provides an overview of the Compensation Committee's key scheduled activities from AGM 2017 to AGM 2018.

	June	July	Sept	Oct	Nov	Dec	Jan	Feb
<b>Strategy, policy and governance</b>								
Revised Total Reward Principles		●						
Three year strategic plan on variable compensation						●		
Compensation disclosure and stakeholder communication matters	●					●		●
AGM reward-related items	●							●
Compensation Committee governance		●				●		●
<b>Annual compensation review</b>								
Accruals and full-year forecast of the performance award pool funding		●		●	●	●	●	●
Performance targets and performance assessment of the Group CEO and GEB members						●	●	●
Group CEO and GEB members' salaries and individual performance awards							●	
Update on market practice, trends and peer group matters	●	●			●			
Pay for performance, including governance on certain higher-paid employees, and non-standard compensation arrangements	●	●	●				●	●
Board of Directors remuneration							●	●
<b>Compensation framework</b>								
Compensation framework and deferred compensation matters	●		●	●		●	●	●
<b>Risk and regulatory</b>								
Risk management in the compensation approach and joint meeting with BoD Risk Committee			●					
Regulatory activities impacting employees and engagement with regulators		●	●	●		●		●

## Compensation governance

The table below provides an overview of compensation governance by specific role.

Recipients	Compensation recommendations developed by	Approved by	Communicated by
Chairman of the BoD	Chairperson of the Compensation Committee	Compensation Committee <sup>1</sup>	Compensation Committee
Independent BoD members (remuneration system and fees)	Compensation Committee and Chairman of the BoD	BoD <sup>1</sup>	Chairman of the BoD
Group CEO	Compensation Committee and Chairman of the BoD	BoD <sup>1</sup>	Chairman of the BoD
Other GEB members	Compensation Committee and Group CEO	BoD <sup>1</sup>	Group CEO
Key Risk Takers (KRTs) / (senior) employees	Respective GEB member together with functional management team	Individual compensation for KRTs and senior employees: Group CEO	Line manager
		Performance award pool for all employees: BoD	

<sup>1</sup> Aggregate compensation for the GEB and aggregate remuneration for the BoD are subject to shareholder approval.

**Shareholder engagement and say-on-pay votes at the AGM** **Approved compensation**

UBS is committed to an ongoing dialog with our shareholders to ascertain their perspectives on developments and trends in compensation and corporate governance matters. In line with the Swiss Ordinance against Excessive Compensation in Listed Stock Corporations, we seek binding shareholder approval for the aggregate compensation for the GEB and for the BoD. The BoD believes that prospective approval for the fixed remuneration for the BoD and the GEB provides the firm and its governing bodies with the certainty necessary to operate effectively. Furthermore, retrospective approval for the GEB's variable compensation awards aligns total compensation for the GEB to performance and contribution and to developments in the market place and across peers. The combination of the binding votes on compensation and the advisory vote on the compensation framework reflects our commitment to our shareholders having their say on pay.

→ Refer to "Provisions of the Articles of Association related to compensation" in the "Supplemental information" section of this report for more information

For the performance year 2017, shareholders approved at the AGM 2016 a maximum aggregate fixed compensation amount of CHF 28,500,000 for the members of the GEB, including base salaries, role-based allowances in response to the EU Capital Requirements Directive IV (CRD IV), estimated standard contribution to retirement benefit plans, other benefits and a buffer. The aggregate fixed compensation paid in 2017 to the GEB members did not exceed the approved amount for 2017.

→ Refer to "Total compensation for GEB members" in the "2017 compensation for the Group CEO and other GEB members" section of this report

**Say on pay – compensation-related votes at the AGM 2017**

AGM 2017 say-on-pay voting schemes		AGM 2017 actual shareholder votes	Vote "for"	Compensation granted
<b>Binding vote on GEB variable compensation</b>	Proposal on the aggregate amount of variable compensation for the GEB for the past performance year	Shareholders approved CHF 71,900,000 for the financial year 2016 <sup>1, 2, 3</sup>	88.9%	CHF 71,900,000
<b>Binding vote on GEB fixed compensation</b>	Proposal on the maximum amount of fixed compensation for the GEB for the following financial year	Shareholders approved CHF 31,500,000 for the financial year 2018	91.4%	To be disclosed in the Compensation Report 2018
<b>Binding vote on BoD remuneration</b>	Proposal on the maximum aggregate amount of remuneration for the BoD for the period from AGM to AGM. This ensures that the term of office and the compensation period are aligned	Shareholders approved CHF 14,000,000 for the period from the AGM 2017 to the AGM 2018 <sup>1, 2</sup>	89.1%	CHF 13,133,565
<b>Advisory vote on compensation report</b>	Proposal on the prior-year compensation report, which provides valuable shareholder feedback on compensation practice in relation to UBS's compensation framework, governance and policy	Shareholders approved the UBS Group AG Compensation Report 2016 in an advisory vote	88.4%	

<sup>1</sup> Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of the Annual Report 2016. <sup>2</sup> Excludes the portion related to the legally required employer's social security contributions. <sup>3</sup> Twelve GEB members were in office on 31 December 2016.

# Our compensation for employees other than GEB members

## Base salary

Employees' fixed compensation reflects their level of skill, role and experience, as well as local market practice. Fixed compensation generally consists of a base salary and, if applicable, a role-based allowance. Base salaries are usually paid monthly or fortnightly. We offer our employees competitive base salaries which vary between functions and locations. Since 2011, salary increases have been limited. Salary increases will continue to be granted to employees who were promoted, have scarce or in-demand skill sets, delivered a very strong performance or took on increased responsibilities.

Overall, we focus on total compensation. For example, 2017 performance award pools take into account salary increases granted earlier in the year. We will continue to review salaries and performance awards in light of market developments, affordability, our performance and our commitment to deliver sustainable returns to our shareholders. UBS is committed to ensuring women and men are paid equitably, and we have robust practices in place intended to ensure compensation and career opportunities reflect our commitment.

In addition to a base salary and as part of fixed compensation, some regulated employees may receive a role-based allowance as described in the "Material Risk Takers" section of this report. Such allowance represents a shift in the compensation mix between fixed and variable compensation and not an increase in total compensation.

## Pensions, benefits, and employee share purchase program

We offer certain benefits to our employees such as health insurance and retirement benefits. These benefits may vary depending on the employee's location and are intended to be competitive in each of the markets in which we operate. Pension contributions and pension plans also vary across locations and countries in accordance with local requirements and market practice. However, pension plan rules in any one location are generally the same for all employees, including management.

The Equity Plus Plan is our employee share purchase program. It allows employees below the rank of managing director to apply up to 30% of their base salary and / or up to 35% of their performance award (up to CHF / USD 20,000 annually) for the purchase of UBS shares. Eligible employees may buy UBS shares at market price and receive one matching share for every three shares purchased through the program. The matching shares vest after a maximum of three years, provided the employee remains employed with the firm and has retained the purchased shares throughout the holding period.

→ Refer to "Note 26 Pension and other post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information

## Performance award

Most of our employees are eligible for an annual performance award. The level of the award, where applicable, depends on the firm's overall performance, the employee's business division performance, as well as individual performance and behavior, reflecting their overall contribution to the firm's results. To link pay with performance, the key performance indicators (KPIs) used to measure our progress in executing our strategy are taken into account when determining the size of each business division's performance award pool. The KPIs also serve as a basis for setting specific performance conditions for vesting of certain deferred compensation plan grants.

In addition to the firm's Principles around client focus, excellence and sustainable performance, on an individual level, Behaviors related to integrity, collaboration and challenge are part of the performance management approach. Therefore, when assessing performance, we take into account not only what was achieved, but also how those results were achieved.

## Benchmarking

Because of the diversity of our businesses, our choice of benchmark companies focuses on the comparability of business division, location and scope of role. For certain businesses or roles, we may take into account practices at other major international banks, other large Swiss private banks, private equity firms, hedge funds and non-financial firms. Furthermore, we also benchmark employee compensation internally for comparable roles within and across business divisions and locations.

## Deferral of performance awards

To reinforce our culture and our approach to manage risk and to emphasize the importance we place on the sustainability of results, we deliver our variable compensation through a deferral rather than a long-term incentive plan. This aligns our employees' and stakeholders' interests and appropriately links compensation to longer-term sustainable performance. A portion of performance awards above a total compensation of CHF / USD 300,000 is deferred in UBS notional shares and / or UBS notional instruments over a period of five years, or longer for certain regulated employees.

We regularly review our principles and compensation framework to remain competitive and aligned with stakeholders. For 2017, we made no changes to our overall framework, e.g., EOP and DCCP terms and conditions; however, our deferral rates for all employees have been refined to better align with market practice.

The deferred amount increases at higher marginal rates in line with the value of the performance award. The portion of the performance award paid out in immediate cash is capped. To remain competitive, we have revised the cap to CHF / USD 2 million (or the equivalent in other currencies) without impacting the overall pay levels. Amounts in excess of the cash cap are deferred in notional shares under the Equity Ownership Plan (EOP). The effective deferral rate therefore depends on the amount of the performance award and the amount of total compensation.

Of the deferred annual performance award, at least 60% is deferred in UBS notional shares under the EOP and up to 40% is deferred in notional instruments under the Deferred Contingent Capital Plan (DCCP). Asset Management employees receive at least 75% of their deferred performance awards in notional funds under the EOP and up to 25% under the DCCP. The average deferral period for deferred performance awards for employees below Group Executive Board (GEB) level is 3.5 years.

The potential realized pay cannot exceed the award granted other than for market movements and returns of the instruments. Therefore, our compensation plans have no upward leverage, such as multiplier factors, and consequently do not encourage excessive risk-taking. We believe UBS has a deferral regime with one of the longest vesting periods in the industry.

- **Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information**
- **Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information**



## Other variable compensation components

To support hiring and retention, particularly at senior levels, we may offer certain other compensation components. These include:

- Replacement payments to compensate employees for deferred awards forfeited as a result of joining the firm. Such payments are industry practice and are often necessary to attract senior candidates, who generally have a significant portion of their awards deferred at their current employer, where continued employment is required to avoid forfeiture.
- Retention payments made to key employees to induce them to stay, particularly during critical periods for the firm.
- On a very limited basis, guarantees may be required to attract individuals with certain skills and experience. These awards are fixed incentives subject to our standard deferral rules and are limited to the first full year of employment.
- Award grants to employees hired late in the year to replace performance awards that they would have earned at their previous employers, but have foregone by joining the firm. These awards are structured with the same level of deferral as for employees at a similar level at UBS. In exceptional cases, candidates may be offered a sign-on award to increase the chances of them accepting our offer.

These other variable compensation components are subject to a comprehensive governance process. Authorization and responsibility may go up to the Board of Directors (BoD) Compensation Committee, depending on the amount or type of such payments.

Employees who are made redundant may receive severance payments. Our severance terms comply with the applicable local laws (legally obligated severance). In certain locations, we may provide severance packages that are negotiated with our local social partners and may go beyond the applicable minimum legal requirements (standard severance). Such payments are governed by location-specific severance policies. In addition, we may make severance payments that exceed legally obligated or standard severance payments (supplemental severance) where we believe that they are aligned with market practice and appropriate under the circumstances. No severance payments are made to members of the GEB.

## Sign-on payments, replacement payments, guarantees and severance payments

CHF million, except where indicated	Total 2017	of which: expenses recognized in 2017 <sup>5</sup>	of which: expenses to be recognized in 2018 and later	Total 2016	Number of beneficiaries	
					2017	2016
<b>Total sign-on payments<sup>1</sup></b>	<b>34</b>	<b>15</b>	19	43	<b>149</b>	145
<i>of which: Key Risk Takers<sup>2</sup></i>	<b>25</b>	<b>8</b>	17	19	<b>15</b>	10
<b>Total replacement payments<sup>3</sup></b>	<b>96</b>	<b>17</b>	79	65	<b>278</b>	221
<i>of which: Key Risk Takers<sup>2</sup></i>	<b>52</b>	<b>11</b>	41	26	<b>27</b>	14
<b>Total guarantees<sup>3</sup></b>	<b>37</b>	<b>17</b>	20	13	<b>39</b>	17
<i>of which: Key Risk Takers<sup>2</sup></i>	<b>20</b>	<b>7</b>	13	0	<b>9</b>	0
<b>Total severance payments<sup>1,4</sup></b>	<b>222</b>	<b>222</b>	0	271	<b>2,205</b>	2,637
<i>of which: Key Risk Takers</i>	<b>2</b>	<b>2</b>	0	4	<b>6</b>	17

<sup>1</sup> GEB members are not eligible for sign-on or severance payments. <sup>2</sup> Expenses for Key Risk Takers are full-year amounts for individuals in office on 31 December 2017. Key Risk Takers include employees with a total compensation exceeding CHF / USD 2.5 million (Highly-Paid Employees). <sup>3</sup> No GEB member received replacement payments or guarantees for 2017 or 2016. <sup>4</sup> Severance payments include legally obligated and standard severance. <sup>5</sup> Expenses before post-vesting transfer restrictions.

**Compensation for financial advisors in Wealth Management Americas**

In line with market practice for US wealth management businesses, the compensation for financial advisors in Wealth Management Americas is comprised of production payout and deferred compensation awards. Production payout, paid monthly, is primarily based on compensable revenue. Financial advisors may also qualify for deferred compensation awards, which vest over various time periods of up to 10 years. The awards are based on strategic performance measures, including production, length of service with the firm and net new business. Production payout rates and deferred compensation awards may be reduced for, among other things, errors, negligence or carelessness, or a failure to comply with the firm's rules, standards, practices and policies or applicable laws and regulations.

**Key Risk Takers**

Key Risk Takers (KRTs) are globally defined as those employees who, by the nature of their roles, have been determined to materially set, commit or control significant amounts of the

firm's resources and / or exert significant influence over its risk profile. This includes employees who work in front-office roles, logistics and control functions. Identifying KRTs is part of our risk control framework and an important element in ensuring we incentivize only appropriate risk-taking. For 2017, 719 employees were classified as KRTs, including all 12 GEB members. This group also includes all employees with a total compensation exceeding CHF / USD 2.5 million (Highly Paid Employees) who may not have been identified as KRTs during the performance year.

The performance of employees identified as KRTs during the performance year is evaluated by the control functions.

In line with regulatory requirements, KRTs' performance awards are subject to a mandatory deferral rate of at least 50%, regardless of whether the deferral threshold has been met. A KRT's deferred compensation award will only vest if the relevant Group and / or business division performance conditions are met. Like for all other employees, the deferred portion of KRTs' compensation is also subject to forfeiture or reduction if the KRT commits harmful acts.

Group Managing Directors (GMDs) receive part of their annual performance award under the DCCP and EOP with the same vesting conditions as for KRTs.

**Fixed and variable compensation for Key Risk Takers<sup>1</sup>**

CHF million, except where indicated	Total for the year ended 2017		Not deferred		Deferred <sup>2</sup>		Total for the year ended 2016 <sup>3</sup>
	Amount	%	Amount	%	Amount	%	Amount
<b>Total compensation</b>							
Amount <sup>4</sup>	1,324	100	806	61	519	39	1,138
Number of beneficiaries	707						649
<b>Fixed compensation<sup>4,5</sup></b>	435	33	435	100	0	0	386
Cash-based	408	31	408		0		357
Equity-based	27	2	27		0		29
<b>Variable compensation</b>	889	67	371	42	519	58	752
Immediate cash <sup>6</sup>	371	28	371		0		233
Equity Ownership Plan (EOP) <sup>7</sup>	319	24	0		319		322
Deferred Contingent Capital Plan (DCCP) <sup>7</sup>	199	15	0		199		197

<sup>1</sup> Includes employees with a total compensation exceeding CHF / USD 2.5 million (Highly Paid Employees), excluding GEB members who were in office on 31 December 2017. <sup>2</sup> Based on the specific plan vesting and reflects the total value at grant which may differ from the accounting expenses. <sup>3</sup> 2016 figures as reported in our Annual Report 2016. <sup>4</sup> Excludes benefits and employer's contribution to retirement benefits plan. <sup>5</sup> Includes base salary and role-based allowances. <sup>6</sup> Includes allocation of vested but blocked shares, in line with UK Prudential Regulation Authority remuneration code. <sup>7</sup> Starting with performance year 2017 KRTs who are also MRTs, are no longer permitted to receive dividend and interest payments. Accordingly the amounts reflect for EOP the fair value of the non-dividend bearing awards and for DCCP the fair value of the granted non-interest bearing awards.

## Material Risk Takers

For entities that are regulated in the EU, we identify individuals who are deemed to be Material Risk Takers (MRTs) based on the respective EU Commission Regulation, the Capital Requirements Directive (CRD) and the guidelines on sound remuneration policies issued by the European Banking Authority (EBA). This group consists of senior management, risk takers, selected staff in control or support functions and certain employees whose total compensation is above a specified threshold. For 2017, UBS identified a group of 623 MRTs in the UK and 59 MRTs across our other EU entities.

Variable compensation awarded to MRTs is subject to specific requirements from local regulators based on the EBA guidelines such as a maximum variable to fixed compensation ratio. Further, generally 50% of their upfront performance award is delivered in UBS shares that vest immediately but are blocked for 12 months, as well as minimum deferral requirements between 40% and 60%.

Any notional shares granted to MRTs under the EOP and notional DCCP awards for their performance in 2017 are subject to a six-month blocking period post vesting and do not pay out dividends or interest.

Since 2015, performance awards granted to UK MRTs have been subject to clawback provisions for a period of up to seven years from the date of grant. In line with the EBA guidelines, clawback has also been introduced from 2018 in other EU jurisdictions as applicable. Under these provisions, the firm may claim repayment of both the immediate and the vested deferred element of any performance award if an individual is found to have contributed substantially to significant financial losses for the Group, a material downward restatement of disclosed results, or engaged in misconduct and/or failed to take expected actions that contributed to significant harm to the Group's reputation.

In line with market practice, MRTs may receive a role-based allowance in addition to their base salary. This role-based allowance reflects the market value of a specific role and is fixed, non-forfeitable compensation. Unlike salary, a role-based allowance is paid only as long as the employee is in a specific role. Importantly, the role-based allowance represents a shift in the compensation mix between fixed and variable compensation and not an increase in total compensation. Similar to 2016, the 2017 role-based allowances consisted of an immediate cash portion and, where applicable, a blocked UBS share award.

## UK Senior Managers and Certification Regime

The Senior Managers and Certification Regime (SMCR) of the UK PRA and FCA requires that individuals with specified responsibilities, performing certain significant functions and / or those in certain other identified categories be designated as Senior Management Functions (SMFs).

SMFs are subject to specific compensation requirements, including longer deferral as well as longer blocking and clawback periods. The deferral period for SMFs is seven years, with the deferred performance awards vesting in equal installments between years 3 and 7. Additionally, these awards are subject to a 12-month blocking period post vesting. The clawback policy for SMFs permits clawback for up to 10 years from the date of performance award grants (applicable if an individual is subject to an investigation at the end of the initial seven-year clawback period). All SMFs are also identified as MRTs and as such subject to the same prohibitions on dividend and interest payments.

## Control functions and Group Internal Audit

Our control functions, Risk Control (including Compliance), Finance and Legal, must be independent in order to monitor risk effectively. Therefore, we determine their compensation independently from the revenue producers that they oversee, supervise or support. Their performance award pool is not based on the performance of these businesses, but on the performance of the Group as a whole. In addition, we consider other factors, such as how effectively the function has performed, and our market position. Decisions on individual compensation for the senior managers of the control functions are made by the function heads and approved by the Group CEO. Decisions on individual compensation for the members of Group Internal Audit (GIA) are made by the Head of GIA and approved by the Chairman of the BoD. Upon proposal by the Chairman, total compensation for the Head of GIA is approved by the Compensation Committee in consultation with the Audit Committee.

## Our deferred variable compensation plans for 2017

### Deferred compensation

Deferred compensation is delivered through two plans: (i) the Equity Ownership Plan (EOP), which primarily aligns employee interest with those of our shareholders, and (ii) the Deferred Contingent Capital Plan (DCCP), which aligns employee interest with the interests of bondholders.

The average deferral period is 4.4 years for Group Executive Board (GEB) members and 3.5 years for employees below GEB level. To further promote sustainable performance our deferred compensation components include malus conditions. Malus conditions enable the firm to forfeit unvested deferred awards

under certain circumstances, including performance and harmful acts provisions. Additionally, deferred awards granted to our most senior employees and to Highly Paid Employees (employees with a total compensation exceeding CHF / USD 2.5 million) are subject to performance conditions. Under the EOP and DCCP, employees who are not Material Risk Takers (MRTs) may receive annual dividend equivalents / notional interest payments. EBA guidelines, starting with performance year 2017, no longer permit MRTs to receive dividend or interest payments on instruments awarded as deferred variable remuneration.

### Overview of our deferred variable compensation plans

		Equity Ownership Plan	Deferred Contingent Capital Plan
<b>Beneficiaries</b>		GEB members, Key Risk Takers and all employees with total compensation greater than CHF/USD 300,000	GEB members, Key Risk Takers and all employees with total compensation greater than CHF/USD 300,000
<b>Deferral mix<sup>1</sup> (between EOP and DCCP)</b>		GEB members: at least 62.5% Asset Management employees: at least 75% All other employees: at least 60%	GEB members: up to 37.5% Asset Management employees: up to 25% All other employees: up to 40%
<b>Vesting schedule<sup>1</sup></b>		GEB members: vests in three installments after years 3, 4 and 5 Asset Management employees: vests in three installments after years 2, 3 and 5 All other employees: vests in equal installments after years 2 and 3	GEB members and all other employees: vests in full after 5 years
<b>Conditions influencing payout</b>	<b>Share price</b>	√	
	<b>Forfeiture clauses</b>	√	√
	<b>Harmful acts</b>	√	√
	<b>Performance conditions</b>	GEB members, GMDs, Key Risk Takers (including Highly Paid Employees) and SMFs: number of UBS shares delivered at vesting depends on the achievement of both Group and respective business division performance conditions <sup>2</sup>	Depends on whether a trigger event or viability event has occurred and, for GEB members, also on profitability
<b>Profitability as funding driver</b>		√	√
<b>Instrument</b>		UBS notional shares <sup>3</sup> (eligible for dividend equivalents <sup>4</sup> )	Notional instruments and interest <sup>4</sup>

<sup>1</sup> Senior Management Functions have extended deferral periods, with the deferred performance awards vesting in equal installments between years 3 and 7. <sup>2</sup> Includes Asset Management employees who are Group Managing Directors (GMDs) or Key Risk Takers (including Highly Paid Employees). <sup>3</sup> Notional funds for Asset Management employees. <sup>4</sup> Material Risk Takers are ineligible for dividends, including dividend equivalents and interest, including notional interest on their unvested performance awards.

## Equity Ownership Plan

The Equity Ownership Plan (EOP) is a mandatory deferral plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive at least 60% of their deferred performance award under the EOP in notional shares, which are eligible for dividend equivalents where regulation permits. For performance year 2017, we granted EOP awards to 5,127 employees.

The plan includes provisions that allow the firm to reduce or fully forfeit the unvested deferred portion of the granted EOP award if an employee commits certain harmful acts, and in most cases trigger forfeiture where employment has been terminated.

EOP awards granted to Asset Management employees have a different vesting schedule and deferral mix, as shown in the table "Overview of our deferred variable compensation plans" on the previous page, and are granted as cash-settled notional funds. This aligns Asset Management employee compensation more closely with industry standards.

EOP awards granted to GEB members, Group Managing Directors (GMDs), Key Risk Takers (including Highly Paid Employees) and Senior Management Functions (SMFs) will only vest if both Group and business division performance conditions are met. The Group performance is measured based on the average adjusted return on tangible equity (RoTE) over the performance period. Our assessment for vesting purposes excludes the effect of deferred tax assets (DTAs) as these are not reflective of the underlying performance of the Group, do not impact our ability to return capital to shareholders and are not within management control. Further, the recognition of DTAs which were positive in the past, has never had an impact on the performance award vesting. Business division performance is measured on the basis of the business division's average adjusted return on attributed equity (RoAE). For Corporate Center employees, it is measured on the basis of the average operating businesses RoAE.

The primary measure to determine vesting of EOP awards is the average adjusted RoTE. If the average adjusted RoTE is equal to or above the performance threshold of 8%, the EOP award will vest in full, provided that the relevant business division performance condition has also been met. If the average adjusted RoTE is 0% or negative, the installment will be fully forfeited regardless of any business division's individual performance. If the average adjusted RoTE is between 0% and 8%, the award will vest on a linear basis at 0–100%, again provided that the relevant business division performance condition is met.

The secondary measure to determine vesting of EOP awards is business division RoAE. If the business division RoAE performance threshold (refer to the table on the next page) is met, the EOP award will vest in accordance with the achievement of the primary measure. However, if the RoAE falls below the minimum threshold but is above 0%, the award will be partly forfeited. The extent of the forfeiture depends on how far the actual RoAE falls below the performance threshold for that business division and can be up to 40% of the award that would otherwise vest based on the average adjusted RoTE. If the actual RoAE for a business division is 0% or negative, the installment will be fully forfeited for that business division. The Compensation Committee determines whether the performance conditions have been met.

By linking the vesting of EOP awards with minimum return on equity performance over a multi-year time horizon, we encourage our employees to develop and manage the business in a way that delivers sustainable returns. The adjusted RoTE threshold of 8% promotes sustainable performance by keeping variable compensation of earlier years at a prudently established level of risk.

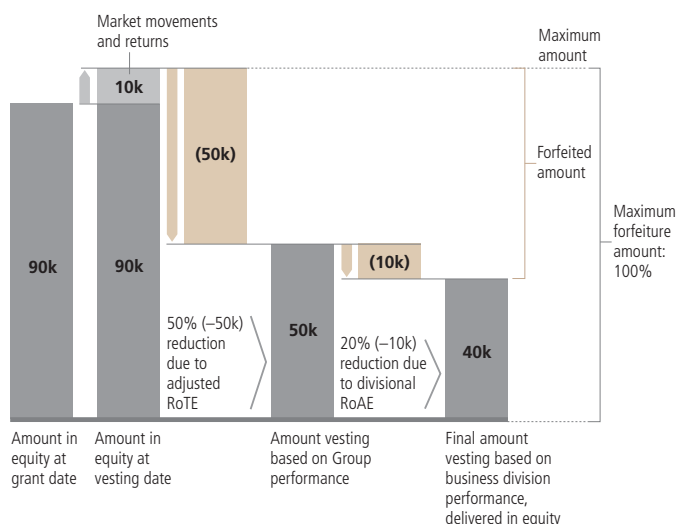
→ **Refer to the "Supplemental information" section of this report for more information on vesting of outstanding awards granted in prior years subject to performance conditions**

**Illustrative example for EOP performance conditions**

The final amount due to vest under the EOP will depend, in a first step, on the degree to which the adjusted RoTE is achieved. In a second step, the business division RoAE performance thresholds have to be satisfied. The award may forfeit up to 100% based on the adjusted RoTE performance. The remaining award is further subject to 100% forfeiture if the business division RoAE is 0% or negative, or up to 40% if the business division RoAE is between 0% and the business division performance threshold.

**Example:**

- EOP award granted: CHF 90,000 in equity
- EOP award at vesting date: CHF 100,000 in equity due to market movements and returns (+11%)
- Adjusted RoTE threshold: 8%; three-year average Group performance: 4%
- Business division RoAE threshold: 20%; three-year average business division performance: 10%



**Performance conditions for EOP awards granted in February 2018**

As part of the strategic planning process, the Compensation Committee annually sets the adjusted RoTE threshold and each business division's RoAE performance threshold for the following calendar year. The performance thresholds are set taking into consideration past performance as well as the forward-looking three-year strategic plan and any changes in the attributed

equity framework. Once set, the performance thresholds remain in place for all EOP performance vesting installments for that particular award year. For GEB members, the award vests in equal installments after years 3, 4 and 5. For GMDs, KRTs including Highly Paid Employees, the award vests in equal installments after years 2 and 3.

	Vesting after	Applicable performance period
GEB / SMF <sup>1</sup>	3 years (installment 1)	2018, 2019 and 2020
	4 years (installment 2)	2019, 2020 and 2021
	5 years (installment 3)	2020, 2021 and 2022
GMDs, Key Risk Takers (including Highly Paid Employees)	2 years (installment 1)	2018 and 2019
	3 years (installment 2)	2018, 2019 and 2020

<sup>1</sup> Senior Management Functions have extended deferral period, with the deferred performance awards vesting in equal installments between years 3 and 7 (including DCCP).

**Group RoTE performance threshold**

Average adjusted Group RoTE	≥8%
-----------------------------	-----

**Business division RoAE performance thresholds**

Global Wealth Management	≥25%
Personal & Corporate Banking	≥15%
Asset Management	≥25%
Investment Bank	≥10%
Corporate Center <sup>1</sup>	≥15%

<sup>1</sup> For Corporate Center employees, average operating businesses RoAE performance threshold.

## Deferred Contingent Capital Plan

The Deferred Contingent Capital Plan (DCCP) is a mandatory deferral plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive up to 40% of their deferred performance award under the DCCP, with the exception of Asset Management employees, who receive up to 25%, and GEB members, who receive up to 37.5%. For performance year 2017, we granted DCCP awards to 5,100 employees.

Employees are awarded notional additional tier 1 (AT1) capital instruments, which can be settled in the form of either a cash payment or a perpetual, marketable AT1 capital instrument, at the discretion of the firm. Prior to grant, employees can elect to have their DCCP awards denominated in either Swiss francs or US dollars.

DCCP awards vest in full after five years and up to seven years for SMFs, unless there is a trigger event. They are written down if the Group's common equity tier 1 (CET1) capital ratio falls below 10% for GEB members and below 7% for all other employees. Awards are also forfeited if a viability event occurs, that is, if FINMA notifies the firm in writing that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if the firm receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. As an additional performance condition, GEB members forfeit 20% of their

award for each loss-making year during the vesting period. Like the EOP, the DCCP also has provisions that allow the firm to apply malus on some, or all, of the unvested deferred portion of a granted award if an employee commits certain harmful acts, or in most cases trigger forfeiture where employment has been terminated.

Under the DCCP, employees who are not MRTs may receive discretionary annual notional interest payments. The notional interest rate for grants in 2018 was 2.30% for awards denominated in Swiss francs and 5.85% for awards denominated in US dollars. These interest rates are based on the current market rates for similar AT1 capital instruments. Notional interest will be paid out annually, subject to review and confirmation by the Group.

Over the last five years, CHF 2,106 million of DCCP was issued, contributing to the Group's total loss-absorbing capacity. Therefore, DCCP awards not only support competitive pay, but also provide a loss absorption buffer that protects the firm's capital position. The following table illustrates the impact of the DCCP on our AT1 and tier 2 capital as well as on our total loss-absorbing capacity ratio.

- Refer to the "Supplemental information" section of this report for more information on performance award- and personnel-related expenses
- Refer to the "Our compensation for employees other than GEB members" section of this report for more information on longer vesting and claw-back periods for MRTs and SMFs

### Impact of the Deferred Contingent Capital Plan on our loss-absorbing capacity<sup>1</sup>

CHF million, except where indicated	31.12.17	31.12.16	31.12.15
<b>Deferred Contingent Capital Plan (DCCP)</b>	<b>2,106</b>	2,271	1,903
<i>of which: high-trigger loss-absorbing additional tier 1 capital</i>	<i>1,670</i>	<i>1,380</i>	<i>991</i>
<i>of which: high-trigger loss-absorbing tier 2 capital<sup>2</sup></i>	<i>435</i>	<i>891</i>	<i>912</i>
DCCP contribution to the total loss-absorbing capacity ratio (%) <sup>3</sup>	<b>0.9</b>	1.0	0.9

<sup>1</sup> Refer to "Bondholder information" at [www.ubs.com/investors](http://www.ubs.com/investors) for more information on the capital instruments of UBS Group AG and of UBS AG both on a consolidated and a standalone basis. <sup>2</sup> DCCP awards granted for the performance years 2012 and 2013. Swiss SRB framework including transitional arrangements (phase-in) as of 31 December 2017 and as of 31 December 2016. Based on the former Swiss SRB framework for 31 December 2015. DCCP instruments qualifying as tier 2 capital are eligible for regulatory capital purposes until 30 December of the year prior to maturity. <sup>3</sup> Impact as of 31 December 2015 was calculated for the former Swiss SRB total capital ratio.

## Supplemental information

## Performance awards granted for the 2017 performance year

The “Variable compensation” table below shows the amount of variable compensation awarded to employees for the performance year 2017, together with the number of

beneficiaries for each type of award granted. In the case of deferred awards, the final amount paid to an employee depends on performance conditions and consideration of relevant forfeiture provisions. The deferred share award amount is based on the market value of these awards on the date of grant.

Variable compensation<sup>1</sup>

	Expenses recognized in the IFRS income statement		Expenses deferred to future periods <sup>4</sup>		Adjustments <sup>4</sup>		Total		Number of beneficiaries	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
<i>CHF million, except where indicated</i>										
Non-deferred cash	2,047	1,817	0	0	0	0	2,047	1,817	45,664	47,581
Deferred compensation awards	392	373	590	671	65	54	1,048	1,098	4,922	4,818
<i>of which: Equity Ownership Plan</i>	235	214	323	372	65 <sup>5</sup>	54 <sup>5</sup>	623	639	4,483	4,388
<i>of which: Deferred Contingent Capital Plan</i>	132	133	241	266	0	0	373	399	4,891	4,785
<i>of which: Asset Management EOP</i>	25	26	27	34	0	0	51	60	439	428
<b>Total variable compensation – performance award pool</b>	<b>2,439</b>	<b>2,191</b>	<b>590</b>	<b>671</b>	<b>65</b>	<b>54</b>	<b>3,095</b>	<b>2,916</b>	<b>45,671</b>	<b>47,603</b>
Variable compensation – other <sup>2</sup>	148	266	191	162	(78) <sup>6</sup>	(98) <sup>6</sup>	262	330		
Wealth Management Americas: Financial advisor compensation <sup>3</sup>	3,025	2,695	513	804	0	0	3,538	3,499	6,822	7,025
<b>Total variable compensation including WMA FA compensation</b>	<b>5,613</b>	<b>5,152</b>	<b>1,294</b>	<b>1,637</b>	<b>(12)</b>	<b>(44)</b>	<b>6,895</b>	<b>6,745</b>		

<sup>1</sup> Expenses under “Variable compensation – other” and “Wealth Management Americas: Financial advisor compensation” are not part of UBS’s performance award pool. <sup>2</sup> Comprised of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. <sup>3</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. <sup>4</sup> Estimate. The actual amount to be expensed in future periods may vary, e.g., due to forfeitures. <sup>5</sup> Represents estimated post-vesting transfer restriction and forfeiture discounts. <sup>6</sup> Included in expenses deferred to future periods is an amount of CHF 78 million (2016: CHF 98 million) in interest expense related to the Deferred Contingent Capital Plan. As the amount recognized as performance award represents the present value of the award at the date it is granted to the employee, this interest amount is adjusted out in the analysis.



## Performance award expenses in the 2017 performance year

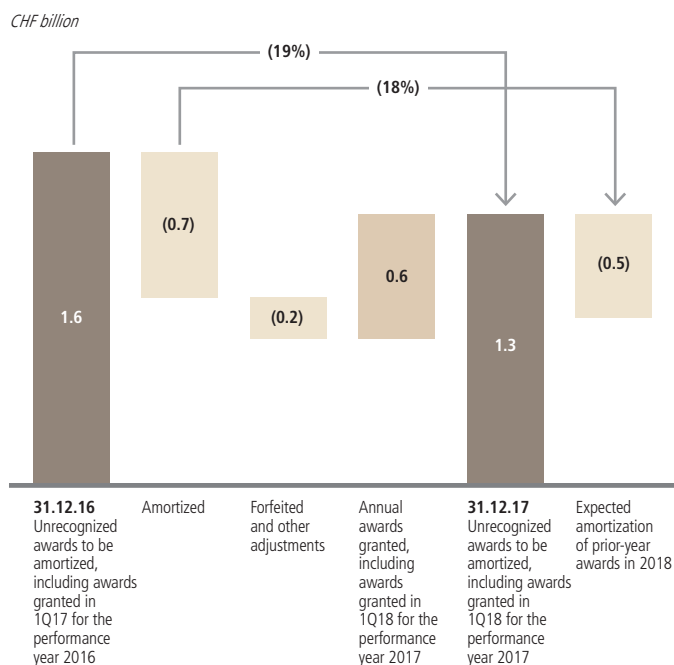
Performance award expenses include all immediate expenses related to 2017 compensation awards and expenses deferred to 2017 related to awards made in prior years. The chart "Amortization of deferred compensation" shows the amount at the end of 2017 of unrecognized awards to be amortized in subsequent years. This was CHF 1.3 billion as of 31 December 2017 and CHF 1.6 billion as of 31 December 2016.

The "GEB and KRTs deferred compensation" table on the next page shows the current economic value of unvested outstanding deferred variable compensation awards subject to ex-post adjustments. For share-based plans, the economic value is determined based on the closing share price on 29 December 2017. For notional funds, it is determined using the latest available market price for the underlying funds at year-end 2017, and for deferred cash plans, it is determined based on the outstanding amount of cash owed to award recipients.

The "GEB and KRTs ex-post explicit and implicit adjustments to deferred compensation in 2017" table on the next page shows the value of actual ex-post explicit and implicit adjustments to outstanding deferred compensation in the financial year 2017. Ex-post adjustments occur after an award has been granted. Ex-post explicit adjustments occur when we adjust compensation by forfeiting deferred awards. Ex-post implicit adjustments are unrelated to any action taken by the firm and occur as a result of share price movements that impact the value of an award. The total value of ex-post explicit adjustments made to UBS shares in 2017, based on the approximately 7.7 million shares forfeited during 2017, is a reduction of CHF 138.5 million. The size of implicit adjustments is mainly due to an increase in the share price. However, the share price as of year-end means that many of the options previously granted remain out of the money. Hence, the majority of outstanding option awards had no intrinsic value at the end of 2017.

→ Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information

## Amortization of deferred compensation



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### GEB and KRTs deferred compensation<sup>1,2</sup>

<i>CHF million, except where indicated</i>	Relating to awards for 2017	Relating to awards for prior years <sup>3</sup>	Total	<i>of which: exposed to ex-post explicit and / or implicit adjustments</i>	Total deferred compensation year-end 2016	Total amount of deferred remuneration paid out in 2017 <sup>4</sup>
<b>GEB</b>						
Deferred Contingent Capital Plan <sup>6</sup>	22	79	101	100%	81	0
Equity Ownership Plan (including notional funds, if applicable) <sup>6</sup>	37	139	176	100%	138	18
Discontinued deferred compensation plans <sup>5</sup>	0	0	0	100%	2	2
<b>KRTs</b>						
Deferred Contingent Capital Plan	199	919	1,119	100%	1,003	0
Equity Ownership Plan (including notional funds) <sup>6</sup>	319	1,177	1,496	100%	1,372	310
Discontinued deferred compensation plans <sup>5</sup>	0	0	0	100%	2	2
<b>Total GEB and KRTs</b>	<b>578</b>	<b>2,314</b>	<b>2,892</b>		<b>2,599</b>	<b>332</b>

<sup>1</sup> Based on specific plan vesting and reflecting the economic value of the outstanding awards, which may differ from the accounting expenses. Year to year reconciliations would also need to consider the impacts of additional items including off-cycle awards, FX movements, population changes, and dividend equivalent reinvestments. <sup>2</sup> Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information. <sup>3</sup> Takes into account the ex-post implicit adjustments, given the share price movements since grant. <sup>4</sup> Valued at distribution price and FX rate for all awards distributed in 2017. <sup>5</sup> Senior Executive Equity Ownership Plan (SEEOP) and Incentive Performance Plan (IPP). <sup>6</sup> Starting with performance year 2017, GEB and KRT members who are also MRTs, are no longer permitted to receive dividend and interested payments. Accordingly the amounts reflect for EOP the fair value of the non-dividend bearing awards and for DCCP the fair value of the granted non-interest bearing awards.

### GEB and KRTs ex-post explicit and implicit adjustments to deferred compensation in 2017

<i>CHF million</i>	Ex-post explicit adjustments <sup>1</sup>		Ex-post implicit adjustments to unvested awards <sup>2</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16
<b>GEB</b>				
Deferred Contingent Capital Plan	0	0	0	0
Equity Ownership Plan (including notional funds, if applicable)	0	0	25	4
Discontinued deferred compensation plans	0	0	0	0
<b>KRTs</b>				
Deferred Contingent Capital Plan	(7)	(3)	0	0
Equity Ownership Plan (including notional funds)	(6)	(5)	209	42
Discontinued deferred compensation plans	0	0	0	0
<b>Total GEB and KRTs</b>	<b>(13)</b>	<b>(8)</b>	<b>234</b>	<b>46</b>

<sup>1</sup> Ex-post explicit adjustments are calculated as units forfeited during the year, valued at the share price on 31 December 2017 (CHF 17.94) and 31 December 2016 (CHF 15.95) for UBS shares. For the notional funds awarded to Asset Management employees under the EOP, this represents the forfeiture credits recognized in 2017 and 2016. For the DCCP, the fair value at grant of the forfeited awards during the year is reflected. <sup>2</sup> Ex-post implicit adjustments for UBS shares are calculated based on the difference between the weighted average grant date fair value and the share price at year-end. The amount for notional funds is calculated using the mark-to-market change during 2017 and 2016.

## Total personnel expenses for 2017

As of 31 December 2017, there were 61,253 employees (on a full-time equivalent basis). The "Personnel expenses" table below shows our total personnel expenses for 2017. It includes salaries, pension contributions and other personnel costs, social security contributions and variable compensation. Variable compensation includes cash performance awards paid in 2018 for the 2017 performance year, the amortization of unvested deferred awards granted in previous years and the cost of deferred awards granted to employees who are eligible for retirement in the context of the compensation framework at the date of grant.

The performance award pool reflects the value of performance awards granted relating to the 2017 performance year, including awards that are paid out immediately and those that are deferred. To determine our variable compensation expenses, the following adjustments are required in order to

reconcile the performance award pool to the expenses recognized in the Group's financial statements prepared in accordance with International Financial Reporting Standards (IFRS):

- reduction for the unrecognized future amortization (including accounting adjustments) of unvested deferred awards granted in 2018 for the performance year 2017
- addition for the 2017 amortization of unvested deferred awards granted in prior years

As a large part of compensation consists of deferred awards, the amortization of unvested deferred awards granted in prior years forms a significant part of the IFRS expenses in both 2016 and 2017.

→ Refer to "Note 6 Personnel expenses" and "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information

## Personnel expenses

CHF million	Expenses recognized in the IFRS income statement				
	Related to the performance year 2017	Related to prior performance years	Total expenses recognized in 2017	Total expenses recognized in 2016	Total expenses recognized in 2015
<b>Salaries<sup>1</sup></b>	<b>6,037</b>	<b>0</b>	<b>6,037</b>	6,230	6,282
Non-deferred cash	2,047	(25)	2,022	1,775	1,980
Deferred compensation awards	392	676	1,068	1,197	1,230
<i>of which: Equity Ownership Plan</i>	235	337	572	699	722
<i>of which: Deferred Contingent Capital Plan</i>	132	304	437	428	429
<i>of which: Asset Management EOP</i>	25	31	55	65	67
<i>of which: Other performance awards</i>	0	4	4	6	12
<b>Total variable compensation – performance awards<sup>2</sup></b>	<b>2,439</b>	<b>651</b>	<b>3,090</b>	2,972	3,210
<i>of which: guarantees for new hires</i>	17	19	36	30	38
Replacement payments <sup>3</sup>	13	58	71	86	76
Forfeiture credits	0	(105)	(105)	(73)	(86)
Severance payments <sup>4</sup>	111	0	111	217	157
Retention plan and other payments	25	37	62	74	117
Deferred Contingent Capital Plan: interest expense	0	109	109	113	81
<b>Total variable compensation – other<sup>2</sup></b>	<b>148</b>	<b>99</b>	<b>248</b>	418	346
<b>Contractors</b>	<b>451</b>	<b>0</b>	<b>451</b>	420	365
<b>Social security</b>	<b>755</b>	<b>43</b>	<b>798</b>	747	820
<b>Pension and other post-employment benefit plans<sup>5</sup></b>	<b>710</b>	<b>0</b>	<b>710</b>	670	808
<b>Wealth Management Americas: financial advisor compensation<sup>2,6</sup></b>	<b>3,025</b>	<b>962</b>	<b>3,986</b>	3,697	3,552
<b>Other personnel expenses</b>	<b>546</b>	<b>25</b>	<b>570</b>	565	600
<b>Total personnel expenses<sup>7</sup></b>	<b>14,110</b>	<b>1,780</b>	<b>15,889</b>	15,720	15,981

<sup>1</sup> Includes role-based allowances. <sup>2</sup> Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information. <sup>3</sup> Payments made to compensate employees for deferred awards forfeited as a result of joining UBS. Includes the expenses recognized in the financial year (mainly the amortization of the award). <sup>4</sup> Includes legally obligated and standard severance payments. <sup>5</sup> Refer to "Note 26 Pension and other post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information. <sup>6</sup> Consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. <sup>7</sup> Includes net restructuring expenses of CHF 534 million, CHF 751 million and CHF 460 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information.

**Vesting of outstanding awards granted in prior years subject to performance conditions**

The tables below show the extent to which the performance conditions for awards granted in prior years have been met and the percentage of the awards that vest in 2018.

Equity Ownership Plan (EOP) 2012 / 2013, EOP 2013 / 2014, EOP 2014 / 2015 and EOP 2015 / 2016		
Performance conditions	Performance achieved	% of installment vesting
Adjusted return on tangible equity <sup>1</sup> and divisional return on attributed equity	The Group and divisional performance conditions have been satisfied. For the EOP 2012 / 2013, the third and final installment for the Group Executive Board (GEB) members vests in full. For the EOP 2013 / 2014, the second installment for the GEB members and the second installment for all other employees covered under the plan vest in full. For the EOP 2014 / 2015, the first installment for the GEB members and the second installment for all other employees covered under the plan vest in full. For the EOP 2015 / 2016, the first installment for all other employees covered under the plan vests in full	100%

<sup>1</sup> The assessment for vesting purposes excludes the effect of deferred tax assets (DTAs). Further, DTAs, when positive, have never had an impact on the performance award vesting.

Deferred Contingent Capital Plan (DCCP) 2012 / 2013		
Performance conditions	Performance achieved	% of installment vesting
Common equity tier 1 (CET1) capital ratio, viability event and additionally for GEB, Group adjusted profit before tax	The performance conditions have been satisfied. The DCCP 2012 / 2013 vests in full	100%

**Discontinued deferred compensation plans**

The table below lists discontinued compensation plans that had outstanding balances as of 31 December 2017. The firm has not granted any options since 2009. The strike price for stock options awarded under prior compensation plans has not been reset.

→ Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information

Plan	Years granted	Eligible employees	Instrument	Performance conditions	Vesting period and other conditions	Status as of March 2018
Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP)	2002–2009	Selected employees (approximately 17,000 employees between 2002 and 2009)	Share-settled stock appreciation rights (SARs) or stock options	None	Vests in full three years after grant, subject to continued employment, non-solicitation of clients and employees and non-disclosure of proprietary information	Expired (some options / SARs remain exercisable)
Senior Executive Stock Option Plan (SESOP)	2002–2009	GEB members and members of the Group Managing Board	Stock options	None	Vests in full three years after grant, subject to continued employment, non-solicitation of clients and employees and non-disclosure of proprietary information	Expired (some options remain exercisable)

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Share and option ownership / entitlements of GEB members<sup>1</sup>

Name, function	on 31 December	Number of unvested shares / at risk <sup>2</sup>	Number of vested shares	Total number of shares	Potentially conferred voting rights in %	Number of options <sup>3</sup>	Potentially conferred voting rights in % <sup>4</sup>
Sergio P. Ermotti, Group Chief Executive Officer	2017	1,632,464	460,377	2,092,841	0.121	0	0.000
	2016	1,365,537	265,515	1,631,052	0.097	0	0.000
Martin Blessing, Co-President Global Wealth Management	2017	65,761	0	65,761	0.004	0	0.000
	2016	0	0	0	0.000	0	0.000
Christian Bluhm, Group Chief Risk Officer	2017	131,520	0	131,520	0.008	0	0.000
	2016	0	0	0	0.000	0	0.000
Markus U. Diethelm, Group General Counsel	2017	589,659	194,000	783,659	0.045	0	0.000
	2016	538,520	154,820	693,340	0.041	0	0.000
Kirt Gardner, Group Chief Financial Officer	2017	264,718	61,652	326,370	0.019	0	0.000
	2016	142,646	38,581	181,227	0.011	0	0.000
Sabine Keller-Busse, Group Chief Operating Officer	2017	244,676	176,602	421,278	0.024	0	0.000
	2016	200,272	120,897	321,169	0.019	0	0.000
Ulrich Körner, President Asset Management and President UBS EMEA	2017	881,979	95,597	977,576	0.057	0	0.000
	2016	797,165	95,597	892,762	0.053	0	0.000
Axel P. Lehmann, President Personal & Corporate Banking and President UBS Switzerland	2017	156,180	277,978	434,158	0.025	0	0.000
	2016	0	277,978	277,978	0.017	0	0.000
Tom Naratil, Co-President Global Wealth Management and President UBS Americas	2017	1,047,311	422,298	1,469,609	0.085	281,640	0.016
	2016	838,193	352,634	1,190,827	0.071	412,917	0.025
Andrea Orcel, President Investment Bank	2017	1,328,113	251,439	1,579,552	0.091	0	0.000
	2016	1,203,535	184,220	1,387,755	0.083	0	0.000
Kathryn Shih, President UBS Asia Pacific	2017	581,546	0	581,546	0.034	74,599	0.004
	2016	567,777	0	567,777	0.034	143,869	0.009
Jürg Zeltner, former President Wealth Management	2017	976,001	1,075	977,076	0.057	42,628	0.002
	2016	881,976	1,075	883,051	0.053	64,164	0.004
<b>Total</b>	2017	7,899,928	1,941,018	9,840,946	0.569	398,867	0.023
	2016	6,535,621	1,514,211	8,049,832	0.479	620,950	0.037

<sup>1</sup> Includes all vested and unvested shares and options of GEB members, including those held by related parties. <sup>2</sup> Includes shares granted under variable compensation plans with forfeiture provisions. The actual number of shares vesting in the future will be calculated under the terms of the plans. Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information on the plans.  
<sup>3</sup> Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information. <sup>4</sup> No conversion rights outstanding.

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### Total of all vested and unvested shares of GEB members<sup>1,2</sup>

	Total	of which: vested	of which: vesting				
			2018	2019	2020	2021	2022
Shares on 31 December 2017	9,840,946	1,941,018	1,796,694	1,825,372	1,992,458	1,465,516	819,888
			2017	2018	2019	2020	2021
Shares on 31 December 2016	8,049,833	1,514,211	1,267,603	1,750,024	1,762,463	1,132,150	623,381

<sup>1</sup> Includes shares held by related parties. <sup>2</sup> Includes shares granted under variable compensation plans with forfeiture provisions. The actual number of shares vesting in the future will be calculated under the terms of the plans. Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information.



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Number of shares of BoD members<sup>1</sup>

Name, function	on 31 December	Number of shares held	Voting rights in %
Axel A. Weber, Chairman	2017	642,100	0.037
	2016	635,751	0.038
Michel Demaré, Vice Chairman	2017	290,694	0.017
	2016	254,287	0.015
David Sidwell, Senior Independent Director	2017	154,672	0.009
	2016	205,540	0.012
Reto Francioni, member	2017	76,772	0.004
	2016	51,567	0.003
Ann F. Godbehere, member	2017	232,263	0.013
	2016	201,457	0.012
William G. Parrett, member	2017	106,916	0.006
	2016	104,385	0.006
Julie G. Richardson, member <sup>2</sup>	2017	0	–
	2016	–	–
Isabelle Romy, member	2017	94,376	0.005
	2016	91,038	0.005
Robert W. Scully, member	2017	29,917	0.002
	2016	0	0.000
Beatrice Weder di Mauro, member	2017	126,809	0.007
	2016	99,737	0.006
Dieter Wemmer, member	2017	14,002	0.001
	2016	0	0.000
Joseph Yam, former member <sup>2</sup>	2017	–	–
	2016	109,938	0.007
<b>Total</b>	2017	1,768,521	0.102
	2016	1,753,700	0.104

<sup>1</sup> Includes blocked and unblocked shares held by BoD members, including those held by related parties. No options were granted in 2017 and 2016. <sup>2</sup> Julie G. Richardson was newly elected and Joseph Yam stepped down from the BoD at the AGM on 4 May 2017.

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Total of all blocked and unblocked shares of BoD members<sup>1</sup>

	Total	of which: unblocked	of which: blocked until			
			2018	2019	2020	2021
Shares on 31 December 2017	1,768,521	294,924	366,821	347,106	364,161	395,509
Shares on 31 December 2016	1,753,700	276,602	337,751	385,005	367,597	386,745

<sup>1</sup> Includes shares held by related parties.



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## Vested and unvested options of GEB members<sup>1</sup>

on 31 December	Total number of options <sup>2</sup>	Number of options <sup>3</sup>	Year of grant	Vesting date	Expiry date	Strike price
<b>Tom Naratil, Co-President Global Wealth Management and President UBS Americas</b>						
<b>2017</b>	<b>281,640</b>	181,640	2008	01.03.2011	28.02.2018	CHF 35.66
		100,000	2009	01.03.2012	27.02.2019	CHF 11.35
<b>2016</b>	<b>412,917</b>	131,277	2007	01.03.2010	28.02.2017	CHF 73.67
		181,640	2008	01.03.2011	28.02.2018	CHF 35.66
		100,000	2009	01.03.2012	27.02.2019	CHF 11.35
<b>Kathryn Shih, President UBS Asia Pacific</b>						
<b>2017</b>	<b>74,599</b>	74,599	2008	01.03.2011	28.02.2018	CHF 35.66
<b>2016</b>	<b>143,869</b>	69,270	2007	01.03.2010	28.02.2017	CHF 73.67
		74,599	2008	01.03.2011	28.02.2018	CHF 35.66
<b>Jürg Zeltner, former President Wealth Management</b>						
<b>2017</b>	<b>42,628</b>	42,628	2008	01.03.2011	28.02.2018	CHF 35.66
<b>2016</b>	<b>64,164</b>	7,105	2007	01.03.2008	28.02.2017	CHF 67.00
		7,105	2007	01.03.2009	28.02.2017	CHF 67.00
		7,103	2007	01.03.2010	28.02.2017	CHF 67.00
		223	2007	02.03.2009	02.03.2017	CHF 67.08
		42,628	2008	01.03.2011	28.02.2018	CHF 35.66

<sup>1</sup> Includes all options held by GEB members, including those held by related parties. <sup>2</sup> No conversion rights outstanding. <sup>3</sup> Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information.

## Audited I

Loans granted to GEB members<sup>1</sup>

In line with article 38 of the Articles of Association of UBS Group AG, Group Executive Board (GEB) members may be granted loans. Such loans are made in the ordinary course of business on substantially the same terms as those granted to other employees, including interest rates and collateral, and neither

involve more than the normal risk of collectability nor contain any other unfavorable features for the firm. The total amount of such loans must not exceed CHF 20 million per GEB member.

CHF, except where indicated<sup>2</sup>

Name, function	on 31 December	Loans <sup>3</sup>
Ulrich Körner, President Asset Management and President UBS EMEA (highest loan in 2017)	2017	8,240,000
Ulrich Körner, President Asset Management and President UBS EMEA (highest loan in 2016)	2016	8,286,193
Aggregate of all GEB members <sup>4</sup>	2017	37,442,914
	2016	37,137,347

<sup>1</sup> No loans have been granted to related parties of the GEB members at conditions not customary in the market. <sup>2</sup> Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report. <sup>3</sup> All loans granted are secured loans. <sup>4</sup> Excludes unused uncommitted credit facilities of CHF 4,952,596 in 2017 that had been granted to two GEB members, and of CHF 2,430,050 in 2016 that had been granted to one GEB member.

## Audited I

Loans granted to BoD members<sup>1</sup>

In line with article 33 of the Articles of Association of UBS Group AG, loans to independent Board of Directors (BoD) members are made in the ordinary course of business at general market conditions. The Chairman as a non-independent member may be granted loans in the ordinary course of business on

substantially the same terms as those granted to employees, including interest rates and collateral, neither involving more than the normal risk of collectability nor containing any other unfavorable features for the firm. The total amount of such loans must not exceed CHF 20 million per BoD member.

CHF, except where indicated<sup>2</sup>

	on 31 December	Loans <sup>3,4,5</sup>
Aggregate of all BoD members	2017	3,524,370
	2016	3,653,370

<sup>1</sup> No loans have been granted to related parties of the BoD members at conditions not customary in the market. <sup>2</sup> Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report. <sup>3</sup> All loans granted are secured loans. <sup>4</sup> CHF 600,000 for Reto Francioni and CHF 2,924,370 for William G. Parrett in 2017 and CHF 600,000 for Reto Francioni and CHF 3,053,370 for William G. Parrett in 2016. <sup>5</sup> Excludes an unused uncommitted credit facility of CHF 243,698 that had been granted to one BoD member in 2017 and CHF 254,448 in 2016.

## Audited I

Compensation paid to former BoD and GEB members<sup>1</sup>

CHF, except where indicated<sup>2</sup>

	For the year	Compensation	Benefits	Total
Former BoD members	2017	0	0	0
	2016	0	0	0
Aggregate of all former GEB members <sup>3</sup>	2017	336,789	44,636	381,425
	2016	0	44,381	44,381
Aggregate of all former BoD and GEB members	2017	336,789	44,636	381,425
	2016	0	44,381	44,381

<sup>1</sup> Compensation or remuneration that is related to the former members' activity on the BoD or GEB or that is not at market conditions. <sup>2</sup> Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report. <sup>3</sup> Includes payments in 2017 to two former GEB members and a payment in 2016 to one former GEB member.

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## Provisions of the Articles of Association related to compensation

Under the say-on-pay provisions in Switzerland, shareholders of Swiss-listed companies have significant influence over board and management compensation. At UBS, this is achieved by means of an annual binding say-on-pay vote in accordance with the following Articles of Association provisions related to compensation:

*Say on pay:* In line with article 43 of the Articles of Association of UBS Group AG, the Annual General Meeting (AGM) shall approve the proposals of the BoD in relation to the maximum aggregate amount of compensation of the BoD for the period until the next AGM, the maximum aggregate amount of fixed compensation of the GEB for the following financial year and the aggregate amount of variable compensation of the GEB for the preceding financial year. The BoD may submit for approval deviating or

additional proposals. In the event the AGM does not approve a proposal, the BoD shall determine, taking into account all relevant factors, an aggregate amount or partial amounts for subsequent approval by shareholders.

*Principles of compensation:* In line with articles 45 and 46 of the Articles of Association of UBS Group AG, compensation of the BoD comprises a base remuneration and may comprise other compensation elements and benefits. Compensation of the GEB consists of fixed and variable compensation elements. Variable compensation elements depend on quantitative and qualitative performance measures as determined by the BoD. Remuneration of the BoD and compensation of the GEB may be paid or granted in the form of cash, shares, financial instruments or units, in kind or in the form of benefits. The BoD determines

the key features such as grant, vesting, exercise and forfeiture conditions and applicable harmful acts provisions.

*Additional amount for GEB members hired after the vote on the aggregate amount of compensation by the AGM:* In line with article 46 of the Articles of Association of UBS Group AG, for the compensation of GEB members who will be appointed after the approval for compensation by the AGM, and to the extent that the aggregate amount of compensation as approved does not suffice, an amount of up to 40% of the average of total annual compensation paid or granted to the GEB during the previous three years is available without further approval by the AGM.

→ Refer to [www.ubs.com/governance](http://www.ubs.com/governance) for more information



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To the General Meeting of  
UBS Group AG, Zurich

Basel, 8 March 2018

## Report of the statutory auditor on the remuneration report

We have audited the compensation report dated 8 March 2018 of UBS Group AG for the year ended 31 December 2017. The audit was limited to the information according to articles 14 – 16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the following tables labeled “audited” of the compensation report: *Total compensation for GEB members, Total payments to BoD members, Compensation details and additional information for non-independent BoD members, Remuneration details and additional information for independent BoD members, Loans granted to GEB members, Loans granted to BoD members and Compensation paid to former BoD and GEB members.*

### Board of Directors' responsibility

The Board of Directors is responsible for the preparation and overall fair presentation of the compensation report in accordance with Swiss law and the Ordinance. The Board of Directors is also responsible for designing the compensation system and defining individual compensation packages.

### Auditor's responsibility

Our responsibility is to express an opinion on the compensation report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the compensation report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the compensation report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the compensation report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of compensation, as well as assessing the overall presentation of the compensation report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Opinion

In our opinion, the compensation report for the year ended 31 December 2017 of UBS Group AG complies with Swiss law and articles 14 – 16 of the Ordinance.

Ernst & Young Ltd

Marie-Laure Delarue  
Licensed audit expert  
(Auditor in charge)

Bruno Patusi  
Licensed audit expert

# Consolidated financial statements

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## **Management's report on internal control over financial reporting**

### **Management's responsibility for internal control over financial reporting**

The Board of Directors and management of UBS Group AG (UBS) are responsible for establishing and maintaining adequate internal control over financial reporting. UBS's internal control over financial reporting is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with IFRS as issued by the IASB.

UBS's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation and fair presentation of financial statements, and that receipts and expenditures of the company are being made only in accordance with authorizations of UBS management; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## **Management's assessment of internal control over financial reporting as of 31 December 2017**

UBS management has assessed the effectiveness of UBS's internal control over financial reporting as of 31 December 2017 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013 Framework). Based on this assessment, management believes that, as of 31 December 2017, UBS's internal control over financial reporting was effective.

The effectiveness of UBS's internal control over financial reporting as of 31 December 2017 has been audited by Ernst & Young Ltd, UBS's independent registered public accounting firm, as stated in their report appearing on page 311, which expresses an unqualified opinion on the effectiveness of UBS's internal control over financial reporting as of 31 December 2017.

## **Reports of the statutory auditor / independent registered public accounting firm**

The accompanying reports of the independent registered public accounting firm on the consolidated financial statements (refer to page 312) and internal control over financial reporting (refer to page 311) of UBS Group AG are included in our filing on 9 March 2018 with the Securities and Exchange Commission on Form 20-F pursuant to US reporting obligations.

The accompanying statutory auditor's report on the audit of the consolidated financial statements (refer to pages 313 to 317) of UBS Group AG, in addition to the abovementioned reports, is included in our Annual Report 2017 available on our website and filed on 9 March 2018 with all other relevant non-US exchanges.





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## Report of Independent Registered Public Accounting Firm

### To the Shareholders and the Board of Directors of UBS Group AG

#### Opinion on Internal Control over Financial Reporting

We have audited UBS Group AG and subsidiaries' internal control over financial reporting as of 31 December 2017, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). In our opinion, UBS Group AG and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of 31 December 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of UBS Group AG and subsidiaries as of 31 December, 2017 and 2016, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended 31 December 2017, and the related notes and our report dated 8 March 2018 expresses an unqualified opinion thereon.

#### Basis for Opinion

UBS Group AG's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the UBS Group AG's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

#### Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Ernst & Young Ltd  
Basel, 8 March 2018



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## Report of Independent Registered Public Accounting Firm

### To the Shareholders and the Board of Directors of UBS Group AG

#### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UBS Group AG and subsidiaries (the Company) as of 31 December 2017 and 2016, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, for each of the three years in the period ended 31 December 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the UBS Group AG and subsidiaries as of December 31, 2017 and 2016, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2017, in conformity with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), UBS Group AG and subsidiaries' internal control over financial reporting as of 31 December 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated 8 March 2018, expressed an unqualified opinion thereon.

#### Basis for Opinion

These financial statements are the responsibility of the Company's Board of Directors. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Ernst & Young Ltd

We have served as the Company's auditor since 1998.  
Basel, 8 March 2018



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To the General Meeting of  
UBS Group AG, Zurich

Basel, 8 March 2018

## **Statutory auditor's report on the audit of the consolidated financial statements**

### **Opinion**

We have audited the consolidated financial statements of UBS Group AG and its subsidiaries (the Group), which comprise the consolidated balance sheets as of 31 December 2017 and 2016, and the consolidated income statements, statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended 31 December 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies in note 1.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended 31 December 2017 in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

### **Basis for opinion**

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Key audit matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

### Deferred tax asset valuation

---

**Area of focus** We focused on this area because there is significant judgment exercised when determining the valuation of Deferred Tax Assets (“DTAs”) given the significant amount of tax net operating loss carryforwards (net operating losses or “NOLs”) the Group has available and the impact of the Tax Cuts and Jobs Act (“TCJA”) in the United States. DTAs can be recognized to the extent it is probable they will be utilized to offset taxable profits within the loss carryforward period or be used against deductible temporary differences. The estimate of future taxable income is based on the strategic plan which is then allocated to the tax-paying entities in the various jurisdictions. The recognition of deferred tax assets is therefore sensitive to changes in the strategic plan as well as to assumptions made in the allocation of future taxable income.

See note 8 to the financial statements.

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**Our audit  
response**

We obtained an understanding of the TCJA. We evaluated the design and tested the operational effectiveness of the Group’s key controls over accounting for the impact of the TCJA. We assessed the impact that the reduction in the federal corporate rate had on deferred taxes and the Group’s disclosures in note 8.

We obtained an understanding, evaluated the design and tested the operational effectiveness of the Group’s key controls over the recognition and measurement of DTAs and the assumptions used in estimating the Group’s future taxable income.

We assessed the completeness and accuracy of the data used for the estimations of future taxable income. This included auditing of computations of the models applied to the recognition process for DTAs and testing the control framework around the models.

We involved EY specialists to assess the key economic assumptions embedded in the strategic plan. We compared key inputs used by the Group to forecast future taxable income to externally available data, the Group’s historical data and performance and assessed the sensitivity of the outcomes to reasonably possible changes in assumptions.

We assessed the completeness and accuracy of the data used in the determination of the legal entity allocation, the assumptions applied by the Group, and the accuracy of the computation of the legal entity allocations.

We also assessed whether the Group’s disclosure regarding the application of judgment in estimating recognized and unrecognized DTAs appropriately reflects the Group’s deferred tax position (within note 8).

### Legal provision & contingencies

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**Area of focus** We focused on this area because the Group operates in a legal and regulatory environment that is exposed to significant litigation and similar risks arising from disputes and regulatory proceedings. Such matters are subject to many uncertainties and the outcome may be difficult to predict. These uncertainties inherently affect the amount and timing of potential outflows with respect to the provisions which have been established and other contingent liabilities. Overall, the legal provision represents the Group's best estimate for existing legal matters that have a probable and estimable impact on the Group's financial position.

See note 20 to the financial statements.

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**Our audit response** We obtained an understanding, evaluated the design and tested the operational effectiveness of the Group's key controls over the legal provision and contingencies process.

We assessed the methodologies on which the provision amounts are based, recalculated the provisions, and tested the completeness and accuracy of the underlying information. We read the legal analyses supporting the judgmental aspects impacted by legal interpretations. We obtained correspondence directly from external legal counsel to corroborate the information provided by the Group and followed up directly with external counsel as deemed necessary.

We also assessed the Group's provisions and contingent liabilities disclosure (within note 20).

### IT Controls relevant to financial reporting

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**Area of focus** We focused on this area because the Group is highly dependent on its IT systems for business processes and financial reporting. The Group continues to invest in its IT systems to meet client needs and business requirements including the effectiveness of its logical access and change management IT controls.

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**Our audit response** In assessing the reliability of electronic data processing, we included specialized IT auditors as part of our audit team. Our audit procedures focused on the IT infrastructure and applications relevant to financial reporting including evaluation of the design and testing of the operating effectiveness of key IT general controls and IT automated controls.

Our audit procedures related to logical access included testing of user access management, privileged user access, periodic access right recertifications and user authentication controls.

**Valuation of complex or illiquid trading portfolio assets and liabilities, financial assets and liabilities and derivative financial instruments held at fair value**

**Area of focus** We focused on this area because of the complexity and judgments and assumptions over the fair valuation of financial assets and liabilities with significant unobservable inputs.

We have continued to focus on market developments in fair value methodologies and specifically on the Group's higher estimation uncertainty ("HEU") products, Credit Valuation Adjustment ("CVA") / and Funding Valuation Adjustment ("FVA").

See note 22 to the financial statements.

**Our audit response** We obtained an understanding, evaluated the design and tested the operating effectiveness of the key controls over the financial instrument valuation processes, including controls over market data inputs into valuation models, model governance, and valuation adjustments.

We tested a sample of the valuation models and the inputs used in those models, using a variety of techniques, including comparing inputs to available market data.

We selected a sample of positions and independently determined estimated values and compared the values to the Group's recorded values.

In addition, we evaluated the methodology and inputs used by the Group in determining funding and credit fair value adjustments on uncollateralized derivatives and fair value option liabilities.

We also assessed the Group's disclosure (within note 22).

**Other information in the annual report**

The Board of Directors is responsible for the other information in the Annual Report. The other information comprises all information included in the Annual Report, but does not include the consolidated financial statements, the unconsolidated financial statements of UBS Group AG, the compensation report (pages 278–281 and page 304), disclosures denoted with an audited "signpost", and our auditor's report thereon.

Our opinions on the consolidated financial statements, the standalone financial statements of UBS Group AG and the compensation report do not cover the other information in the annual report and we do not express any form of assurance conclusion thereon other than the disclosures denoted with an audited "signpost".

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the Annual Report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### **Responsibility of the Board of Directors for the consolidated financial statements**

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

#### **Auditor's responsibilities for the audit of the consolidated financial statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs, and Swiss Auditing Standards and will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

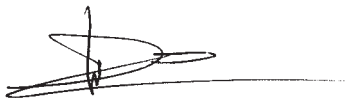
A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: <http://www.expertsuisse.ch/en/audit-report-for-public-companies>. This description forms part of our auditor's report.

#### **Report on other legal and regulatory requirements**

In accordance with article 728a paragraph 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements in accordance with the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd



Marie-Laure Delarue  
Licensed Audit Expert  
(Auditor in Charge)



Ira S. Fitlin  
Certified Public Accountant (U.S.)

# UBS Group AG consolidated financial statements

## Primary financial statements

Audited I

### Income statement

<i>CHF million, except per share data</i>	Note	For the year ended		
		31.12.17	31.12.16	31.12.15
Interest income	3	14,193	13,787	13,177
Interest expense	3	(7,665)	(7,373)	(6,445)
Net interest income	3	6,528	6,413	6,732
Credit loss (expense) / recovery	11	(128)	(37)	(117)
Net interest income after credit loss expense		6,400	6,376	6,615
Net fee and commission income	4	17,186	16,397	17,140
Net trading income	3	4,972	4,948	5,742
Other income	5	509	599	1,107
Total operating income		29,067	28,320	30,605
Personnel expenses	6	15,889	15,720	15,981
General and administrative expenses	7	6,808	7,434	8,107
Depreciation and impairment of property, equipment and software	14	1,033	985	920
Amortization and impairment of intangible assets	15	70	91	107
Total operating expenses		23,800	24,230	25,116
Operating profit / (loss) before tax		5,268	4,090	5,489
Tax expense / (benefit)	8	4,139	805	(898)
Net profit / (loss)		1,128	3,286	6,386
Net profit / (loss) attributable to non-controlling interests		76	82	183
<b>Net profit / (loss) attributable to shareholders</b>		<b>1,053</b>	<b>3,204</b>	<b>6,203</b>
<b>Earnings per share (CHF)</b>				
Basic	9	0.28	0.86	1.68
Diluted	9	0.27	0.84	1.64



## Statement of comprehensive income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Comprehensive income attributable to shareholders</b>			
Net profit / (loss)	1,053	3,204	6,203
<b>Other comprehensive income that may be reclassified to the income statement</b>			
<b>Foreign currency translation</b>			
Foreign currency translation movements, before tax	(748)	251	(140)
Foreign exchange amounts reclassified to the income statement from equity	21	126	(90)
Income tax relating to foreign currency translation movements	196	(84)	(2)
Subtotal foreign currency translation, net of tax	(530)	292	(231)
<b>Financial assets available for sale</b>			
Net unrealized gains / (losses) on financial assets available for sale, before tax	99	240	175
Impairment charges reclassified to the income statement from equity	15	5	1
Realized gains reclassified to the income statement from equity	(206)	(372)	(292)
Realized losses reclassified to the income statement from equity	14	25	44
Income tax relating to net unrealized gains / (losses) on financial assets available for sale	(7)	28	8
Subtotal financial assets available for sale, net of tax	(86)	(73)	(63)
<b>Cash flow hedges</b>			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	45	246	544
Net realized (gains) / losses reclassified to the income statement from equity	(826)	(1,082)	(1,182)
Income tax relating to cash flow hedges	160	170	128
Subtotal cash flow hedges, net of tax	(621)	(666)	(509)
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>(1,237)</b>	<b>(447)</b>	<b>(804)</b>
<b>Other comprehensive income that will not be reclassified to the income statement</b>			
<b>Defined benefit plans</b>			
Gains / (losses) on defined benefit plans, before tax	277	(876)	316
Income tax relating to defined benefit plans	11	52	(18)
Subtotal defined benefit plans, net of tax	288	(824)	298
<b>Own credit on financial liabilities designated at fair value</b>			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(312)	(120)	
Income tax relating to own credit on financial liabilities designated at fair value	(1)	5	
Subtotal own credit on financial liabilities designated at fair value, net of tax	(313)	(115)	
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>(25)</b>	<b>(939)</b>	<b>298</b>
<b>Total other comprehensive income</b>	<b>(1,263)</b>	<b>(1,386)</b>	<b>(506)</b>
<b>Total comprehensive income attributable to shareholders</b>	<b>(210)</b>	<b>1,817</b>	<b>5,698</b>

Table continues on the next page.

## Statement of comprehensive income (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Comprehensive income attributable to non-controlling interests</b>			
Net profit / (loss)	76	82	183
<b>Other comprehensive income that may be reclassified to the income statement</b>			
Other comprehensive income that may be reclassified to the income statement, before tax	0	0	(12)
Income tax relating to other comprehensive income that may be reclassified to the income statement	0	0	2
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>0</b>	<b>0</b>	<b>(10)</b>
<b>Other comprehensive income that will not be reclassified to the income statement</b>			
Foreign currency translation movements, before tax	352	271	(95)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	352	271	(95)
Gains / (losses) on defined benefit plans, before tax	0	0	6
Income tax relating to defined benefit plans	0	0	(1)
Subtotal defined benefit plans, net of tax	0	0	5
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>352</b>	<b>271</b>	<b>(90)</b>
<b>Total other comprehensive income</b>	<b>352</b>	<b>271</b>	<b>(99)</b>
<b>Total comprehensive income attributable to non-controlling interests</b>	<b>428</b>	<b>352</b>	<b>83</b>
<b>Total comprehensive income</b>			
Net profit / (loss)	1,128	3,286	6,386
<b>Other comprehensive income</b>	<b>(911)</b>	<b>(1,116)</b>	<b>(605)</b>
<i>of which: other comprehensive income that may be reclassified to the income statement</i>	<i>(1,237)</i>	<i>(447)</i>	<i>(814)</i>
<i>of which: other comprehensive income that will not be reclassified to the income statement</i>	<i>326</i>	<i>(669)</i>	<i>208</i>
<b>Total comprehensive income</b>	<b>218</b>	<b>2,170</b>	<b>5,781</b>

## Balance sheet

CHF million	Note	31.12.17	31.12.16
<b>Assets</b>			
Cash and balances with central banks		87,775	107,767
Due from banks	10, 11	13,739	13,156
Cash collateral on securities borrowed	24	12,393	15,111
Reverse repurchase agreements	24	77,240	66,246
Trading portfolio assets	22	130,707	96,575
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	23	35,363	30,260
Positive replacement values	12, 22, 24	118,227	158,411
Cash collateral receivables on derivative instruments	24	23,434	26,664
Loans	10, 11	319,568	306,325
Financial assets designated at fair value	22, 24, 25	58,933	65,353
Financial assets available for sale	13, 22	8,665	15,676
Financial assets held to maturity	13	9,166	9,289
Investments in associates	28	1,018	963
Property, equipment and software	14	8,829	8,331
Goodwill and intangible assets	15	6,398	6,556
Deferred tax assets	8	9,844	13,155
Other assets	16	29,706	25,436
<b>Total assets</b>		<b>915,642</b>	<b>935,016</b>
<b>Liabilities</b>			
Due to banks	17	7,533	10,645
Cash collateral on securities lent	24	1,789	2,818
Repurchase agreements	24	15,255	6,612
Trading portfolio liabilities	22	30,463	22,824
Negative replacement values	12, 22, 24	116,133	153,810
Cash collateral payables on derivative instruments	24	30,247	35,472
Due to customers	17	408,999	423,672
Financial liabilities designated at fair value	18, 22, 24	54,202	55,017
Debt issued	19	139,551	103,649
Provisions	20	3,133	4,174
Other liabilities	8, 21	57,064	62,020
<b>Total liabilities</b>		<b>864,371</b>	<b>880,714</b>
<b>Equity</b>			
Share capital		385	385
Share premium		25,942	28,254
Treasury shares		(2,133)	(2,249)
Retained earnings		32,752	31,725
Other comprehensive income recognized directly in equity, net of tax		(5,732)	(4,494)
<b>Equity attributable to shareholders</b>		<b>51,214</b>	<b>53,621</b>
Equity attributable to non-controlling interests		57	682
<b>Total equity</b>		<b>51,271</b>	<b>54,302</b>
<b>Total liabilities and equity</b>		<b>915,642</b>	<b>935,016</b>

## Statement of changes in equity

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
<b>Balance as of 1 January 2015</b>	<b>372</b>	<b>32,590</b>	<b>(1,393)</b>	<b>22,134</b>
Issuance of share capital	0			
Acquisition of treasury shares			(1,538) <sup>3</sup>	
Delivery of treasury shares under share-based compensation plans		(596)	797	
Other disposal of treasury shares		1	478 <sup>3</sup>	
Premium on shares issued and warrants exercised		33		
Share-based compensation expensed in the income statement		858		
Tax (expense) / benefit		9		
Dividends		(2,760) <sup>2</sup>		
Equity classified as obligation to purchase own shares		1		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)				
Total comprehensive income for the year				6,502
<i>of which: net profit / (loss)</i>				6,203
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				298
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
Changes to legal structure / reorganization: increase in UBS Group AG's ownership interest in UBS AG	13	1,029	(37)	868
<b>Balance as of 31 December 2015</b>	<b>385</b>	<b>31,164</b>	<b>(1,693)</b>	<b>29,504</b>
Issuance of share capital	0			
Acquisition of treasury shares			(1,401) <sup>3</sup>	
Delivery of treasury shares under share-based compensation plans		(682)	796	
Other disposal of treasury shares		(2)	49 <sup>3</sup>	
Premium on shares issued and warrants exercised		5		
Share-based compensation expensed in the income statement		861		
Tax (expense) / benefit		28		
Dividends		(3,164) <sup>2</sup>		
Equity classified as obligation to purchase own shares				
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		43		(44)
Total comprehensive income for the year				2,265
<i>of which: net profit / (loss)</i>				3,204
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				(824)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>				(115)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
<b>Balance as of 31 December 2016</b>	<b>385</b>	<b>28,254</b>	<b>(2,249)</b>	<b>31,725</b>

Other comprehensive income recognized directly in equity, net of tax <sup>1</sup>	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Non-controlling interests	Total equity
<b>(3,093)</b>	<i>(5,406)</i>	<i>228</i>	<i>2,084</i>	<b>50,608</b>	<b>3,760</b>	<b>54,368</b>
				0		0
				(1,538)		(1,538)
				200		200
				479		479
				33		33
				858		858
				9		9
				(2,760)	(124)	(2,884)
				1		1
				0		0
				0	0	0
(804)	<i>(231)</i>	<i>(63)</i>	<i>(509)</i>	5,698	83	5,781
				6,203	183	6,386
<i>(804)</i>	<i>(231)</i>	<i>(63)</i>	<i>(509)</i>	<i>(804)</i>	<i>(10)</i>	<i>(814)</i>
				298	5	304
				0	<i>(95)</i>	<i>(95)</i>
(150)	<i>(220)</i>	<i>7</i>	<i>63</i>	1,724	(1,724)	0
<b>(4,047)</b>	<i>(5,857)</i>	<i>172</i>	<i>1,638</i>	<b>55,313</b>	<b>1,995</b>	<b>57,308</b>
				0		0
				(1,401)		(1,401)
				115		115
				46		46
				5		5
				861		861
				28		28
				(3,164)	(83)	(3,246)
				0		0
				0	(1,583)	(1,583)
				(1)	0	0
(447)	<i>292</i>	<i>(73)</i>	<i>(666)</i>	1,817	352	2,170
				3,204	82	3,286
<i>(447)</i>	<i>292</i>	<i>(73)</i>	<i>(666)</i>	<i>(447)</i>		<i>(447)</i>
				<i>(824)</i>		<i>(824)</i>
				<i>(115)</i>		<i>(115)</i>
				0	271	271
<b>(4,494)</b>	<i>(5,564)</i>	<i>98</i>	<i>972</i>	<b>53,621</b>	<b>682</b>	<b>54,302</b>

### Statement of changes in equity (continued)

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
<b>Balance as of 31 December 2016</b>	<b>385</b>	<b>28,254</b>	<b>(2,249)</b>	<b>31,725</b>
Issuance of share capital	0			
Acquisition of treasury shares			(908) <sup>3</sup>	
Delivery of treasury shares under share-based compensation plans		(845)	960	
Other disposal of treasury shares		1	64 <sup>3</sup>	
Premium on shares issued and warrants exercised		19		
Share-based compensation expensed in the income statement		721		
Tax (expense) / benefit		21		
Dividends		(2,229) <sup>2</sup>		
Equity classified as obligation to purchase own shares				
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		0		
<b>Total comprehensive income for the year</b>				<b>1,027</b>
<i>of which: net profit / (loss)</i>				<i>1,053</i>
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				<i>288</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>				<i>(313)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
<b>Balance as of 31 December 2017</b>	<b>385</b>	<b>25,942</b>	<b>(2,133)</b>	<b>32,752</b>

<sup>1</sup> Excludes defined benefit plans and own credit that are recorded directly in retained earnings. <sup>2</sup> Reflects the payment of an ordinary cash dividend of CHF 0.60 (2016: CHF 0.60 ordinary cash dividend and CHF 0.25 special cash dividend; 2015: CHF 0.50 ordinary cash dividend and CHF 0.25 special cash dividend) per dividend-bearing share out of the capital contribution reserve. <sup>3</sup> Includes treasury shares acquired and disposed of by the Investment Bank in its capacity as a market-maker in UBS shares and related derivatives and to hedge certain issued structured debt instruments. These acquisitions and disposals are reported based on the sum of the net monthly movements.

Other comprehensive income recognized directly in equity, net of tax <sup>1</sup>	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Non-controlling interests	Total equity
<b>(4,494)</b>	<i>(5,564)</i>	<i>98</i>	<i>972</i>	<b>53,621</b>	<b>682</b>	<b>54,302</b>
				0		0
				(908)		(908)
				114		114
				65		65
				19		19
				721		721
				21		21
				(2,229)	(77)	(2,306)
				0		0
				0	(993)	(993)
				0	17	18
(1,237)	(530)	(86)	(621)	(210)	428	218
				1,053	76	1,128
(1,237)	(530)	(86)	(621)	(1,237)		(1,237)
				288		288
				(313)		(313)
				0	352	352
<b>(5,732)</b>	<i><b>(6,095)</b></i>	<i><b>12</b></i>	<i><b>351</b></i>	<b>51,214</b>	<b>57</b>	<b>51,271</b>

### UBS Group AG shares issued and treasury shares held

	For the year ended	
<i>Number of shares</i>	<b>31.12.17</b>	31.12.16
<b>Shares issued</b>		
Balance at the beginning of the year	<b>3,850,766,389</b>	3,849,731,535
Issuance of shares	<b>2,330,214</b>	1,034,854
<b>Balance at the end of the year</b>	<b>3,853,096,603</b>	3,850,766,389
<b>Treasury shares</b>		
Balance at the beginning of the year	<b>138,441,772</b>	98,706,275
Acquisitions	<b>54,828,640</b>	90,448,847
Disposals	<b>(60,968,862)</b>	(50,713,350)
<b>Balance at the end of the year</b>	<b>132,301,550</b>	138,441,772

### Conditional share capital

As of 31 December 2017, 127,664,622 additional UBS Group AG shares could have been issued to fund UBS's employee share option programs.

Additional conditional capital up to a maximum number of 380,000,000 UBS Group AG shares was available as of 31 December 2017 for conversion rights and warrants granted in connection with the issuance of bonds or similar financial instruments.



## Statement of cash flows

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Cash flow from / (used in) operating activities</b>			
Net profit / (loss)	1,128	3,286	6,386
<b>Non-cash items included in net profit and other adjustments:</b>			
Depreciation and impairment of property, equipment and software	1,033	985	920
Amortization and impairment of intangible assets	70	91	107
Credit loss expense / (recovery)	128	37	117
Share of net profits of associates / joint ventures and impairment of associates	(68)	(106)	(169)
Deferred tax expense / (benefit)	3,264	(7)	(1,613)
Net loss / (gain) from investing activities	(203)	(1,176)	(934)
Net loss / (gain) from financing activities	2,132	9,647	(1,451)
Other net adjustments	(513)	(267)	3,686
<b>Net change in operating assets and liabilities:</b>			
Due from / to banks	(3,184)	(1,180)	1,763
Cash collateral on securities borrowed and reverse repurchase agreements	(7,654)	7,933	(2,712)
Cash collateral on securities lent and repurchase agreements	7,432	(6,637)	(2,909)
Trading portfolio and replacement values	(21,847)	6,054	6,830
Financial assets designated at fair value	7,268	(60,650)	(1,325)
Cash collateral on derivative instruments	(2,479)	(4,169)	3,285
Loans	(14,224)	3,658	1,386
Due to customers	(12,700)	33,572	(18,404)
Other assets, provisions and other liabilities	(9,477)	(6,874)	8,696
Income taxes paid, net of refunds	(1,015)	(656)	(551)
<b>Net cash flow from / (used in) operating activities</b>	<b>(50,911)</b>	<b>(16,457)</b>	<b>3,109</b>
<b>Cash flow from / (used in) investing activities</b>			
Purchase of subsidiaries, associates and intangible assets	(102)	(26)	(13)
Disposal of subsidiaries, associates and intangible assets <sup>1</sup>	336	93	477
Purchase of property, equipment and software	(1,593)	(1,777)	(1,841)
Disposal of property, equipment and software	68	209	542
Purchase of financial assets available for sale	(8,448)	(7,271)	(101,189)
Disposal and redemption of financial assets available for sale	14,917	54,097	93,584
Net (purchase) / redemption of financial assets held to maturity	(77)	(8,996)	
<b>Net cash flow from / (used in) investing activities</b>	<b>5,100</b>	<b>36,328</b>	<b>(8,441)</b>

Table continues on the next page.

## Statement of cash flows (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Cash flow from / (used in) financing activities</b>			
Net short-term debt issued / (repaid)	24,141	5,440	(6,404)
Net movements in treasury shares and own equity derivative activity	(730)	(1,248)	(845)
Distributions paid on UBS shares	(2,229)	(3,164)	(2,760)
Issuance of long-term debt, including financial liabilities designated at fair value	49,506	33,256	47,790
Repayment of long-term debt, including financial liabilities designated at fair value	(43,299)	(33,885)	(44,221)
Net changes in non-controlling interests and preferred notes	(781)	(1,371)	(156)
<b>Net cash flow from / (used in) financing activities</b>	<b>26,608</b>	<b>(972)</b>	<b>(6,595)</b>
<b>Total cash flow</b>			
Cash and cash equivalents at the beginning of the year	121,138	103,044	116,715
Net cash flow from / (used in) operating, investing and financing activities	(19,203)	18,900	(11,928)
Effects of exchange rate differences on cash and cash equivalents	265	(806)	(1,742)
<b>Cash and cash equivalents at the end of the year<sup>2</sup></b>	<b>102,200</b>	<b>121,138</b>	<b>103,044</b>
<i>of which: cash and balances with central banks</i>	<i>87,700</i>	<i>107,715</i>	<i>91,306</i>
<i>of which: due from banks</i>	<i>12,452</i>	<i>11,959</i>	<i>10,814</i>
<i>of which: money market paper<sup>3</sup></i>	<i>2,049</i>	<i>1,465</i>	<i>924</i>

### Additional information

Net cash flow from / (used in) operating activities includes:

Interest received in cash	12,445	12,228	11,144
Interest paid in cash	6,568	6,129	5,270
Dividends on equity investments, investment funds and associates received in cash <sup>4</sup>	1,790	1,595	2,120

<sup>1</sup> Includes dividends received from associates. <sup>2</sup> CHF 2,434 million, CHF 2,662 million and CHF 3,963 million of cash and cash equivalents (mainly reflected in Due from banks) were restricted as of 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 23 for more information. <sup>3</sup> Money market paper is included in the balance sheet under Trading portfolio assets (31 December 2017: CHF 131 million, 31 December 2016: CHF 75 million, 31 December 2015: CHF 795 million), Financial assets available for sale (31 December 2017: CHF 23 million, 31 December 2016: CHF 430 million, 31 December 2015: CHF 129 million) and Financial assets designated at fair value (31 December 2017: CHF 1,894 million, 31 December 2016: CHF 959 million, 31 December 2015: CHF 0 million). <sup>4</sup> Includes dividends received from associates (2017: CHF 51 million, 2016: CHF 50 million, 2015: CHF 114 million) reported within Cash flow from / (used in) investing activities.

## Changes in liabilities arising from financing activities

CHF million	Debt issued	of which:		Financial liabilities designated at fair value	Total
		short-term	long-term		
<b>Balance as of 1 January 2017</b>	103,649	26,178	77,472	55,017	158,666
Cash flows	35,903	24,141	11,762	(5,556)	30,348
Non-cash changes	(1)	634	(635)	4,740	4,739
<i>of which: foreign currency translation</i>	<i>422</i>	<i>634</i>	<i>(211)</i>	<i>593</i>	<i>1,016</i>
<i>of which: fair value changes</i>				<i>4,147</i>	<i>4,147</i>
<i>of which: other</i>	<i>(424)<sup>1</sup></i>	<i>0</i>	<i>(424)<sup>1</sup></i>	<i>0</i>	<i>(424)</i>
<b>Balance as of 31 December 2017</b>	<b>139,551</b>	<b>50,953</b>	<b>88,599</b>	<b>54,202</b>	<b>193,753</b>

<sup>1</sup> Includes the effect of fair value hedges on long-term debt issued. Refer to Note 1a item k and Note 19 for more information.

# Notes to the UBS Group AG consolidated financial statements

## Note 1 Summary of significant accounting policies

### a) Significant accounting policies

This Note describes the significant accounting policies applied in the preparation of the consolidated financial statements (the "Financial Statements") of UBS Group AG and its subsidiaries ("UBS" or the "Group"). On 8 March 2018, the Financial Statements were authorized for issue by the Board of Directors.

#### Basis of accounting

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), and are presented in Swiss francs (CHF), which is also the functional currency of UBS Group AG and of UBS AG's Head Office and its Swiss-based operations.

Disclosures provided in the "Risk, treasury and capital management" section of this report that are marked as audited form an integral part of the Financial Statements. These disclosures relate to requirements under IFRS 7, *Financial Instruments: Disclosures* and IAS 1, *Presentation of Financial Statements* and are not repeated in this section.

The accounting policies described in this Note have been applied consistently in all years presented unless otherwise stated in Note 1b.

#### Critical accounting estimates and judgments

Preparation of these Financial Statements under IFRS requires management to apply judgment and make estimates and assumptions that affect reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities, and may involve significant uncertainty at the time they are made. Such estimates and assumptions are based on the best available information. UBS regularly reassesses the estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and it updates them as necessary. Changes in those estimates and assumptions may have a significant impact

on the Financial Statements. Further, actual results may differ significantly from UBS's estimates, which could result in significant loss to the Group, beyond what it anticipated or provided for.

The following areas contain estimation uncertainty or require critical judgment and have a significant effect on the amounts recognized in the Financial Statements:

- fair value of financial instruments (refer to item 3f in this Note and to Note 22)
- allowances and provisions for credit losses (refer to item 3g in this Note and to Note 11)
- pension and other post-employment benefit plans (refer to item 7 in this Note and to Note 26)
- income taxes (refer to item 8 in this Note and to Note 8)
- goodwill (refer to item 11 in this Note and to Note 15)
- provisions and contingent liabilities (refer to item 12 in this Note and to Note 20)
- consolidation of structured entities (refer to item 1 in this Note and to Note 28).

#### 1) Consolidation

##### a. Consolidation principles

The Financial Statements comprise the financial statements of the parent company (UBS Group AG) and its subsidiaries, presented as a single economic entity, whereby intercompany transactions and balances have been eliminated. UBS consolidates all entities that it controls, including controlled structured entities (SEs), which is the case when it has (i) power over the relevant activities of the entity, (ii) exposure to an entity's variable returns and (iii) the ability to use its power to affect its own returns.

Where an entity is governed by voting rights, control is generally indicated by a direct shareholding of more than one-half of the voting rights.

## Note 1 Summary of significant accounting policies (continued)

In other cases, the assessment of control is more complex and requires greater use of judgment. Where UBS has an interest in an entity that absorbs variability, UBS considers whether it has power over the relevant activities of the entity that allows it to affect the variability of its returns. Consideration is given to all facts and circumstances to determine whether the Group has power over another entity; that is, the current ability to direct the relevant activities of an entity when decisions about those activities need to be made. Factors such as the purpose and design of the entity, rights held through contractual arrangements, such as call rights, put rights or liquidation rights, as well as potential decision-making rights are all considered in this assessment. Where the Group has power over the relevant activities, a further assessment is made to determine whether, through that power, it has the ability to affect its own returns by assessing whether power is held in a principal or agent capacity. Consideration is given to (i) the scope of decision-making authority, (ii) rights held by other parties, including removal or other participating rights, and (iii) exposure to variability, including remuneration, relative to total variability of the entity as well as whether that exposure is different from that of other investors. If, after review of these factors, UBS concludes that it can exercise its power to affect its own returns, the entity is consolidated.

Subsidiaries, including SEs, are consolidated from the date when control is obtained and are deconsolidated from the date when control ceases. Control, or the lack thereof, is reassessed if facts and circumstances indicate that there is a change to one or more of the elements required to establish that control is present.

→ Refer to Note 28 for more information

### b. Structured entities

UBS sponsors the formation of SEs and interacts with non-sponsored SEs for a variety of reasons, including allowing clients to obtain or be exposed to particular risk profiles, to provide funding or to sell or purchase credit risk. An SE is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such entities generally have a narrow and well-defined objective and include those historically referred to as special purpose entities, as well as some investment funds. UBS assesses whether an entity is an SE by considering the nature of the activities of the entity as well as the substance of voting or similar rights afforded to other parties, including investors and independent boards or directors. UBS considers rights such as the ability to liquidate the entity or remove the decision maker to be similar to voting rights when the holder has the substantive ability to exercise such rights without cause. In the absence of such rights or in cases where the existence of such rights cannot be fully established, the entity is considered to be an SE.

The classes of SEs with which UBS is involved include:

- *Securitization structured entities* are established to issue securities to investors that are backed by assets held by the SE and whereby (i) significant credit risk associated with the securitized exposures has been transferred to third parties and (ii) there is more than one risk position or tranche issued by the securitization vehicle in line with the Basel III securitization definition. All securitization entities are classified as SEs.
- *Client investment structured entities* are established predominantly for clients to invest in specific assets or risk exposures through purchasing notes issued by the SE, predominantly on a fixed-term basis. The SE may source assets via a transfer from UBS or through an external market transaction. In some cases, UBS may enter into derivatives with the SE to either align the cash flows of the entity with the investor's intended investment objective or to introduce other desired risk exposures. In certain cases, UBS may have interests in a third-party-sponsored SE to hedge specific risks or participate in asset-backed financing.
- *Investment fund structured entities* have a collective investment objective, are managed by an investment manager and are either passively managed, so that any decision making does not have a substantive effect on variability, or are actively managed and investors or their governing bodies do not have substantive voting or similar rights. UBS creates and sponsors a large number of funds in which it may have an interest through the receipt of variable management fees and / or a direct investment. In addition, UBS has interests in a number of funds created and sponsored by third parties, including exchange-traded funds and hedge funds, to hedge issued structured products.

When UBS does not consolidate an SE, but has an interest in an SE or has sponsored an SE, disclosures are provided on the nature of these interests and sponsorship activities.

### Critical accounting estimates and judgments

Each individual entity is assessed for consolidation in line with the aforementioned consolidation principles. The assessment of control can be complex and requires the use of significant judgment. As the nature and extent of UBS's involvement are unique to each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not.

→ Refer to Note 28 for more information

## Note 1 Summary of significant accounting policies (continued)

### 2) Segment reporting

As of 31 December 2017, UBS's businesses were organized globally into five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank, all of which were supported by Corporate Center. The five business divisions qualify as reportable segments for the purpose of segment reporting and, together with Corporate Center, reflect the management structure of the Group. Corporate Center – Non-core and Legacy Portfolio is managed and reported as a separate reportable segment within Corporate Center. Financial information about the five business divisions and Corporate Center (with its units: Services, Group Asset and Liability Management (Group ALM), Non-core and Legacy Portfolio) is presented separately in internal management reports to the Group Executive Board, which is considered the "chief operating decision maker" pursuant to IFRS 8, *Operating Segments*.

UBS's internal accounting policies, which include management accounting policies and service level agreements, determine the revenues and expenses directly attributable to each reportable segment. Transactions between the reportable segments are carried out at internally agreed rates and are reflected in the operating results of the reportable segments. Revenue-sharing agreements are used to allocate external client revenues to reportable segments where several reportable segments are involved in the value creation chain. Commissions are credited to the reportable segments based on the corresponding client relationship. Total intersegment revenues for the Group are immaterial, as the majority of the revenues are allocated across the segments by means of revenue-sharing agreements. Net interest income is generally allocated to the reportable segments based on their balance sheet positions. Interest income earned from managing UBS's consolidated equity is allocated to the reportable segments based on average attributed equity. Assets and liabilities of the reportable segments are funded through and invested with Corporate Center – Group ALM, and the net interest margin is reflected in the results of each reportable segment.

Segment assets are based on a third-party view and do not include intercompany balances. This view is in line with internal reporting to the Group Executive Board. Certain assets managed centrally by Corporate Center – Services and Corporate Center – Group ALM may be allocated to other segments on a basis different to that on which the corresponding costs or revenues are allocated. For example, certain assets that are reported in Corporate Center – Services or Corporate Center – Group ALM may be retained on the balance sheet of these components of Corporate Center notwithstanding that the costs or revenues

associated with these assets may be entirely or partly allocated to the segments. Similarly, certain assets are reported in the business divisions, whereas the corresponding costs or revenues are entirely or partly allocated to Corporate Center – Services and Corporate Center – Group ALM.

Non-current assets disclosed for segment reporting purposes represent assets that are expected to be recovered more than twelve months after the reporting date, excluding financial instruments, deferred tax assets, post-employment benefits and rights arising under insurance contracts.

→ **Refer to Notes 1c and 2 for more information**

### 3) Financial instruments

#### a. Recognition

UBS recognizes financial instruments when it becomes a party to the contractual provisions of the instrument. UBS applies settlement date accounting to all regular way purchases and sales of financial instruments.

In transactions in which UBS acts as a transferee, to the extent that the transfer of a financial asset does not qualify for derecognition by the transferor, UBS does not recognize the transferred asset as its asset.

UBS also acts in a fiduciary capacity, which results in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless the recognition criteria are satisfied, these assets are not recognized on UBS's balance sheet. Consequently, the related income is excluded from these Financial Statements.

Client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, the Group neither obtains benefits from nor controls the client cash balances.

#### b. Classification, measurement and presentation

Upon initial recognition, UBS records financial instruments at fair value plus, for financial instruments not measured at fair value through profit or loss, directly attributable transaction costs. After initial recognition, UBS classifies, measures and presents its financial assets and liabilities in accordance with IAS 39, *Financial Instruments: Recognition and Measurement* as described in the following table.

→ **Refer to Note 25a for an overview of financial assets and liabilities by IAS 39 category**

→ **Refer to the balance sheet for references to Notes that provide information on the composition of individual financial asset and liability categories**

## Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
<b>Held for trading</b>	<p>All derivatives with a positive replacement value, except those that are designated and effective hedging instruments.</p> <p>Any other financial asset acquired principally for the purpose of selling or repurchasing in the near term, or part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. Included in this category are debt instruments (including those in the form of securities, money market paper and traded corporate and bank loans), equity instruments, and assets held under unit-linked investment contracts.</p>	<p>Measured at fair value with changes recognized in profit or loss.</p> <p>Changes in fair value, initial transaction costs and gains and losses realized on disposal or redemption are recognized in <i>Net trading income</i>, except interest and dividend income on instruments other than derivatives (refer to item 3c in this Note), interest on derivatives designated as hedging instruments in certain types of hedge accounting relationships and forward points on certain short duration foreign exchange contracts, which are reported in <i>Net interest income</i>.</p> <p>Derivative assets are generally presented as <i>Positive replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but presented on the same balance sheet line as the host contract measured at amortized cost.</p>
<b>Designated at fair value through profit or loss</b>	<p>A financial asset may be designated at fair value through profit or loss only upon initial recognition and this designation is irrevocable.</p> <p>The fair value option can be applied only if one of the following criteria is met:</p> <ul style="list-style-type: none"> <li>– the financial instrument is a hybrid instrument that includes a substantive embedded derivative;</li> <li>– the financial instrument is part of a portfolio that is risk managed on a fair value basis and reported to senior management on that basis; or</li> <li>– the application of the fair value option eliminates or significantly reduces an accounting mismatch that would otherwise arise.</li> </ul> <p>UBS designated at fair value through profit or loss the following financial assets:</p> <ul style="list-style-type: none"> <li>– Certain structured loans, reverse repurchase and securities borrowing agreements that are managed on a fair value basis.</li> <li>– Loans that are hedged predominantly with credit derivatives. These instruments are designated at fair value to eliminate an accounting mismatch.</li> <li>– Certain debt securities held as high-quality liquid assets (HQLA) and managed by Corporate Center – Group ALM on a fair value basis.</li> <li>– Assets held to hedge delivery obligations related to cash-settled employee compensation plans. These assets are designated at fair value in order to eliminate an accounting mismatch that would otherwise arise due to the liability being measured on a fair value basis.</li> </ul>	<p>The presentation of fair value changes on derivatives that are designated and effective hedging instruments differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Financial assets held for trading (other than derivatives) are presented as <i>Trading portfolio assets</i>.</p> <p>Financial assets designated at fair value through profit or loss are presented as <i>Financial assets designated at fair value</i>.</p>
<b>Loans and receivables (amortized cost)</b>	<p>Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not assets for which the Group may not recover substantially all of its initial net investment for reasons other than credit deterioration. This classification includes:</p> <ul style="list-style-type: none"> <li>– cash and balances with central banks</li> <li>– cash collateral receivables on derivative instruments</li> <li>– residential and commercial mortgages</li> <li>– secured loans, including reverse repurchase agreements, receivables under stock borrowing and Lombard loans, and unsecured loans</li> <li>– certain securities held within Corporate Center – Non-core and Legacy Portfolio</li> <li>– trade and lease receivables.</li> </ul>	<p>Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).</p> <p>Upfront fees and direct costs relating to loan origination, refinancing or restructuring as well as to loan commitments are deferred and amortized over the life of the loan using the effective interest rate method.</p> <p>Loans and receivables are presented on the balance sheet primarily as <i>Cash and balances with central banks, Due from banks, Loans, Cash collateral on securities borrowed, Reverse repurchase agreements</i> and <i>Cash collateral receivables on derivative instruments</i>.</p> <p>Amounts arising from exchange-traded derivatives (ETD) and certain over-the-counter (OTC) derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to items 3d and 3j in this Note) are presented within <i>Cash collateral receivables on derivative instruments</i>.</p>

## Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
<b>Available for sale</b>	Financial assets classified as available for sale are non-derivative financial assets that are not classified as held for trading, designated at fair value through profit or loss, or loans and receivables. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM, certain asset-backed securities managed by Corporate Center – Group ALM, as well as investment fund holdings and strategic and commercial equity investments.	<p>Measured at fair value with unrealized gains and losses reported in <i>Other comprehensive income</i>, net of applicable income taxes, until such investments are sold, collected or otherwise disposed of, or until any such investment is determined to be impaired (refer to item 3i in this Note). Upon disposal, any accumulated balances in <i>Other comprehensive income</i> are reclassified to the income statement and reported within <i>Other income</i>.</p> <p>Interest and dividend income are recognized in the income statement in accordance with item 3c in this Note. Refer to item 13 in this Note for information on the treatment of foreign exchange translation gains and losses.</p>
<b>Held to maturity</b>	Non-derivative financial assets with fixed or determinable payments and fixed maturities for which UBS has the positive intention and ability to hold to maturity. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM.	Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).
Financial liabilities classification	Significant items included	Measurement and presentation
<b>Held for trading</b>	<ul style="list-style-type: none"> <li>– Obligations to deliver financial instruments, such as debt and equity instruments, that UBS has sold to third parties, but does not own (short positions).</li> <li>– All derivatives with a negative replacement value, except those that are designated and effective hedging instruments.</li> </ul>	<p>Measurement of trading liabilities follows the same principles as for held for trading assets, and measurement of liabilities designated at fair value through profit or loss follows the same principles as for assets designated at fair value through profit or loss.</p> <p>Presented as <i>Trading portfolio liabilities</i> and <i>Financial liabilities designated at fair value</i>, respectively.</p>
<b>Designated at fair value through profit or loss</b>	<p>UBS designated at fair value through profit or loss the following financial liabilities:</p> <ul style="list-style-type: none"> <li>– Issued hybrid debt instruments that primarily include equity-linked, credit-linked and rates-linked bonds or notes.</li> <li>– Issued debt instruments managed on a fair value basis.</li> <li>– Loan commitments that are hedged predominantly with credit derivatives and hence eliminate an accounting mismatch.</li> </ul>	<p>Derivative liabilities are generally presented as <i>Negative replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but are presented on the same balance sheet line as the host contract measured at amortized cost.</p> <p>Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Amounts due under unit-linked investment contracts are presented as <i>Other liabilities</i>.</p>
<b>Amortized cost</b>	<p>This classification includes:</p> <ul style="list-style-type: none"> <li>– Demand and time deposits, retail savings / deposits, cash collateral on securities lent, non-structured fixed-rate bonds, subordinated debt, certificates of deposit, covered bonds.</li> <li>– Cash collateral payables on derivative instruments.</li> </ul>	<p>Measured at amortized cost using the effective interest rate method.</p> <p>Amortized cost liabilities are presented on the balance sheet primarily as <i>Due to banks</i>, <i>Due to customers</i>, <i>Cash collateral on securities lent</i>, <i>Repurchase agreements</i>, <i>Cash collateral payables on derivative instruments</i> and <i>Debt issued</i>.</p> <p>Amounts arising from ETD and certain OTC derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to items 3d and 3j of this Note ) are presented within <i>Cash collateral payables on derivative instruments</i>.</p>

## Note 1 Summary of significant accounting policies (continued)

### c. Interest income and expense

Interest income or expense is determined by reference to a financial instrument's amortized-cost basis calculated using the effective interest rate (EIR) method. UBS also uses this method to determine the interest income and expense for financial instruments (excluding derivatives) measured at fair value through profit or loss. Interest income or expense on financial instruments measured at amortized cost, debt instruments measured at fair value through profit or loss and available-for-sale financial assets are presented within *Net interest income*. In addition, *Net interest income* includes the interest income and expense on derivatives designated as hedging instruments in effective hedge relationships and forward points on certain short duration foreign exchange contracts.

Upfront fees, including loan commitment fees where a loan is expected to be issued, and direct costs are included within the initial measurement of a financial instrument measured at amortized cost or classified as available for sale. Such fees and costs are therefore recognized over the expected life of the instrument as part of its EIR.

Fees related to loan commitments where no loan is expected to be issued, as well as loan syndication fees where UBS does not retain a portion of the syndicated loan or where UBS does retain a portion of the syndicated loan at the same effective yield for comparable risk as other participants, are included in *Net fee and commission income*.

Interest income on financial assets, excluding derivatives, is included in *Interest income* when positive and in *Interest expense* when negative, because negative interest income arising on a financial asset does not meet the definition of revenue. Similarly, interest expense on financial liabilities, excluding derivatives, is included in *Interest expense*, except when interest rates are negative, in which case it is included in *Interest income*. Dividend income on all financial assets is included in *Interest income*.

→ Refer to item 3k in this Note and Note 3 for more information

### d. Derecognition

#### *Financial assets*

UBS derecognizes a financial asset, or a portion of a financial asset, from its balance sheet where the contractual rights to cash flows from the asset have expired, or have been transferred, usually by sale, thus exposing the purchaser to either substantially all the risks and rewards of the asset or a significant part of the risks and rewards combined with a practical ability to sell or pledge the asset.

A financial asset is considered to have been transferred when UBS (i) transfers the contractual rights to receive the cash flows of the financial asset or (ii) retains the contractual rights to receive the cash flows of that asset, but assumes a contractual obligation to pay the cash flows to one or more entities.

Where financial assets have been pledged as collateral or in similar arrangements, they are considered to have been transferred if the counterparty has received the contractual right to the cash flows of the pledged assets, as may be evidenced, for example, by the counterparty's right to sell or repledge the assets. Where the counterparty to the pledged financial assets has not received the contractual right to the cash flows, UBS does not consider this to be a transfer for the purposes of derecognition.

UBS enters into certain transactions where it transfers financial assets recognized on its balance sheet but retains either all or a portion of the risks and rewards of the transferred financial assets. If all or substantially all of the risks and rewards are retained, the transferred financial assets are not derecognized from the balance sheet; for example, securities lending and repurchase transactions or where financial assets are sold to a third party with a total return swap resulting in UBS retaining all or substantially all of the risks and rewards of the transferred assets. These types of transactions are accounted for as secured financing transactions as described in item 3e of this Note.

In transactions where substantially all of the risks and rewards of ownership of a financial asset are neither retained nor transferred, UBS derecognizes the financial asset if control over the asset is surrendered, and the rights and obligations retained following the transfer are recognized separately as assets and liabilities, respectively. In transfers where control over the financial asset is retained, UBS continues to recognize the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset following the transfer.

Certain over-the-counter (OTC) derivative contracts and most exchange-traded futures and options contracts cleared through central clearing counterparties are considered to be settled on a daily basis through the daily margining process, as the payment or receipt of the variation margin represents legal or economic settlement of a derivative contract, which results in derecognition of the associated positive and negative replacement values.

→ Refer to Note 24 for more information



## Note 1 Summary of significant accounting policies (continued)

### *Financial liabilities*

UBS derecognizes a financial liability from its balance sheet when it is extinguished, that is, when the obligation specified in the contract is discharged, canceled or has expired. When an existing financial liability is exchanged for a new one from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification results in derecognition of the original liability and the recognition of a new liability with any difference in the respective carrying amounts being recognized in the income statement.

### *e. Securities borrowing / lending and repurchase / reverse repurchase transactions*

Securities borrowing / lending and repurchase / reverse repurchase transactions are generally entered into on a collateralized basis. In such transactions, UBS typically borrows or lends equity and debt securities in exchange for securities or cash collateral.

These transactions are treated as collateralized financing transactions where the securities transferred / received are not derecognized or recognized on balance sheet. Securities transferred / received with the right to resell or repledge are disclosed separately.

In reverse repurchase and securities borrowing agreements, the cash delivered is derecognized and a corresponding receivable, including accrued interest, is recorded in the balance sheet lines *Reverse repurchase agreements* and *Cash collateral on securities borrowed*, respectively, representing UBS's right to receive the cash. Similarly, in repurchase and securities lending agreements, the cash received is recognized and a corresponding obligation, including accrued interest, is recorded in the balance sheet lines *Repurchase agreements* and *Cash collateral on securities lent*, respectively. Additionally, the sale of securities that is settled by delivering securities received in reverse repurchase or securities borrowing transactions triggers the recognition of a trading liability.

Repurchase and reverse repurchase transactions with the same counterparty, maturity, currency and central securities depository (CSD) are generally presented net, subject to meeting the netting requirements described in item 3j of this Note.

→ Refer to Notes 23 and 24 for more information

### *f. Fair value of financial instruments*

UBS accounts for a significant portion of its assets and liabilities at fair value. Fair value is the price on the measurement date that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market, or in the most advantageous market in the absence of a principal market.

All financial instruments measured at fair value are categorized into one of three fair value hierarchy levels. Level 1 financial instruments are those for which fair values can be derived from quoted prices in active markets. Level 2 financial instruments are those for which fair values must be derived using valuation techniques for which all significant inputs are, or are based on, observable market data. Level 3 financial instruments are those for which fair values can only be derived on the basis of valuation techniques for which significant inputs are not based on observable market data.

### *Critical accounting estimates and judgments*

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs require significant judgment and could affect the amount of gain or loss recorded for a particular position. Valuation techniques that rely more heavily on unobservable inputs require a higher level of judgment to calculate a fair value than those entirely based on observable inputs.

Valuation techniques, including models, that are used to determine fair values are periodically reviewed and validated by qualified personnel, independent of those who created them. Models are calibrated to ensure that outputs reflect observable market data, to the extent possible. Also, models prioritize the use of observable inputs, when available, over unobservable inputs. Judgment is required in selecting appropriate models as well as inputs for which observable data is less readily or not available.

UBS's valuation techniques may not fully reflect all the factors relevant to the fair value of financial instruments held. Valuations are therefore adjusted, where appropriate, to allow for additional factors, including credit risk, model risk and liquidity risk.

UBS's governance framework over fair value measurement is described in Note 22b.

The level of subjectivity and the degree of management judgment involved in the development of estimates and the selection of assumptions are more significant for instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less observable (Level 3 instruments) and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors, which are presented in Note 22d. The Group provides a sensitivity analysis of the estimated effects arising from changing significant unobservable inputs in Level 3 financial instruments to reasonably possible alternative assumptions within Note 22g.

→ Refer to Note 22 for more information

## Note 1 Summary of significant accounting policies (continued)

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### g. Allowances and provisions for credit losses

A claim is impaired and an allowance or provision for credit losses is recognized when objective evidence demonstrates that a loss event has occurred after the initial recognition and that the loss event has an impact on the future cash flows that can be reliably estimated (incurred loss approach). UBS considers a claim to be impaired if it will be unable to collect all amounts due on it based on the original contractual terms due to credit deterioration of the issuer or counterparty. A claim can be a loan or receivable carried at amortized cost, or a commitment, such as a letter of credit, a guarantee or a similar instrument.

An allowance for credit losses is reported as a decrease in the carrying value of a financial asset. For an off-balance sheet item, such as a commitment, a provision for credit loss is reported in *Provisions*. Changes to allowances and provisions for credit losses are recognized in *Credit loss expense / recovery*.

→ Refer to Notes 10 and 11 for more information

### Critical accounting estimates and judgments

Allowances and provisions for credit losses are evaluated at both a counterparty-specific level and collectively. Judgment is used in making assumptions about the timing and amount of impairment losses.

#### Counterparty-specific allowances and provisions

Loans are evaluated individually for impairment if objective evidence indicates that a loan may be impaired. Individual credit exposures are evaluated on the basis of the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The impairment loss for a loan is the excess of the carrying value of the financial asset over the estimated recoverable amount. The estimated recoverable amount is the present value, calculated using the loan's original effective interest rate, of expected future cash flows, including amounts that may result from restructuring or the liquidation of collateral. If a loan has a variable interest rate, the discount rate for calculating the recoverable amount is the current effective interest rate. Upon impairment, interest income is accrued by

applying the original effective interest rate to the impaired carrying value of the loan.

All impaired loans are reviewed and analyzed at least annually. Any subsequent changes to the amounts and timing of the expected future cash flows compared with prior estimates result in a change in the allowance for credit losses and are charged or credited to *Credit loss expense / recovery*. An allowance for impairment is reversed only when the credit quality has improved to such an extent that there is reasonable assurance of timely collection of principal and interest in accordance with the original contractual terms of the instrument, or the equivalent value thereof. A write-off is made when all or part of a financial asset is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are credited to *Credit loss expense / recovery*.

#### Collective allowances and provisions

Collective allowances and provisions are calculated for portfolios with similar credit risk characteristics, taking into account historical loss experience and current conditions. The methodology and assumptions used are reviewed regularly to reduce any differences between estimated and actual loss experience. For all of its portfolios, UBS also assesses whether there have been any unforeseen developments that might result in impairments that are not immediately observable at a counterparty level. To determine whether an event-driven collective allowance for credit losses is required, UBS considers global economic drivers to assess the most vulnerable countries and industries. As the allowance cannot be allocated to individual loans, the loans are not considered to be impaired and interest is accrued on each loan according to its contractual terms. If objective evidence becomes available that indicates that an individual financial asset is impaired, it is removed from the group of financial assets assessed for impairment on a collective basis and is assessed separately as counterparty-specific.

## Note 1 Summary of significant accounting policies (continued)

### h. Restructured loans

A renegotiated or restructured loan is a loan for which the terms have been modified or for which additional collateral has been requested that was not contemplated in the original contract.

Typical key features of terms and conditions granted through restructuring to avoid default include special interest rates, postponement of interest or principal payments, debt / equity swaps, modification of the schedule of repayments, subordination or amendment of loan maturity. There is no change in the EIR following a renegotiation.

If a loan is restructured with preferential conditions (i.e., new or modified terms and conditions are agreed upon that do not meet the normal market criteria for the quality of the obligor and the type of loan), it is classified as defaulted. It will remain so until the loan is collected, written off or non-preferential conditions are granted that supersede the preferential conditions.

Concessions granted where there is no evidence of financial difficulty, or where any changes to terms and conditions are within UBS's usual risk appetite, are not deemed restructured.

A restructuring of a loan could lead to a fundamental change in the terms, resulting in the original loan being derecognized and a new loan being recognized.

If a loan is derecognized in these circumstances, the new loan is measured at fair value at initial recognition. Any allowance taken to date against the original loan is derecognized and is not attributed to the new loan. Consequently, the new loan is assessed for impairment on an individual basis. If the loan is not impaired, the loan is included within the general collective loan assessment for the purpose of measuring credit losses.

### i. Impairment of financial assets classified as available for sale

At each balance sheet date, UBS assesses whether indicators of impairment are present. Available-for-sale debt instruments are impaired when there is objective evidence, using the same criteria described in item 3g, that, as a result of one or more events that occurred after the initial recognition of the asset, the estimated future cash flows have decreased.

Objective evidence that there has been an impairment of an available-for-sale equity instrument is a significant or prolonged decline in the fair value of the asset. UBS uses a rebuttable presumption that such instruments are impaired where there has been a decline in fair value of more than 20% below its original cost or fair value has been below original cost for more than six months.

To the extent a financial asset classified as available for sale is determined to be impaired, the related cumulative net unrealized loss previously recognized in *Other comprehensive income* is reclassified to the income statement within *Other income*. For equity instruments, any further loss is recognized directly in the income statement, whereas for debt instruments, any further loss is recognized in the income statement only if

there is additional objective evidence of impairment. After the recognition of an impairment on a financial asset classified as available for sale, increases in the fair value of equity instruments are reported in *Other comprehensive income*. For debt instruments, such increases in the fair value, up to amortized cost in the transaction currency, are recognized in *Other income*, provided that the fair value increase is related to an event occurring after the impairment loss was recorded. Increases in excess of that amount are reported in *Other comprehensive income*.

### j. Netting

UBS nets financial assets and liabilities on its balance sheet if (i) it has the unconditional and legally enforceable right to set off the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS and its counterparties, and (ii) intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Netted positions include, for example, certain derivatives and repurchase and reverse repurchase transactions with various counterparties, exchanges and clearing houses.

In assessing whether UBS intends to either settle on a net basis, or to realize the asset and settle the liability simultaneously, emphasis is placed on the effectiveness of operational settlement mechanics in eliminating substantially all credit and liquidity exposure between the counterparties. This condition precludes offsetting on the balance sheet for substantial amounts of UBS's financial assets and liabilities, even though they may be subject to enforceable netting arrangements. For OTC derivative contracts, balance sheet offsetting is generally only permitted in circumstances in which a market settlement mechanism exists via an exchange or central clearing counterparty that effectively accomplishes net settlement through a daily exchange of collateral via a cash margining process. For repurchase arrangements and securities financing transactions, balance sheet offsetting may be permitted only to the extent that the settlement mechanism eliminates, or results in insignificant, credit and liquidity risk, and processes the receivables and payables in a single settlement process or cycle.

→ Refer to Note 24 for more information

### k. Hedge accounting

The Group uses derivative and non-derivative instruments to manage exposures to interest rate and foreign currency risks, including exposures arising from forecast transactions. Qualifying instruments may be designated as hedging instruments in (i) hedges of the change in fair value of recognized assets or liabilities (fair value hedges), (ii) hedges of the variability in future cash flows attributable to a recognized asset or liability or highly probable forecast transactions (cash flow hedges) or (iii) hedges of a net investment in a foreign operation (net investment hedges).

## Note 1 Summary of significant accounting policies (continued)

At the time a financial instrument is designated in a hedge relationship, UBS formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction and the methods that will be used to assess the effectiveness of the hedging relationship. Accordingly, UBS assesses, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments, primarily derivatives, have been "highly effective" in offsetting changes in the fair value or cash flows associated with the designated risk of the hedged items. A hedge is considered highly effective if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk and (ii) actual results of the hedge are within a range of 80–125%. In the case of hedging forecast transactions, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. UBS discontinues hedge accounting when (i) it determines that a hedging instrument is not, or has ceased to be, highly effective as a hedge, (ii) the derivative expires or is sold, terminated or exercised, (iii) the hedged item matures, is sold or repaid or (iv) forecast transactions are no longer deemed highly probable. The Group may also discontinue hedge accounting voluntarily.

Hedge ineffectiveness represents the amount by which the changes in the fair value of the hedging instrument differ from changes in the fair value of the hedged item attributable to the hedged risk, or the amount by which changes in the present value of future cash flows of the hedging instrument exceed changes in the present value of expected cash flows of the hedged item. Such ineffectiveness is recorded in current period earnings in *Net trading income*.

Interest from derivatives designated as hedging instruments in effective fair value hedge relationships is presented within *Interest income from loans and deposits* and *Interest expense on debt issued*, within *Net interest income*. Interest from derivatives designated as hedging instruments in effective cash flow hedge relationships that is reclassified from other comprehensive income when the hedged transaction affects profit or loss is presented within *Interest income from derivative instruments designated as cash flow hedges*.

→ Refer to Note 3 for more information

### Fair value hedges

For qualifying fair value hedges, the change in the fair value of the hedging instrument is recognized in the income statement along with the change in the fair value of the hedged item that is attributable to the hedged risk. In fair value hedges of interest rate risk, the fair value change of the hedged item attributable to the hedged risk is reflected as an adjustment to the carrying value of

the hedged item. If the hedge accounting relationship is terminated for reasons other than the derecognition of the hedged item, the adjustment to the carrying value is amortized to the income statement over the remaining term to maturity of the hedged item using the effective interest rate method. For a portfolio hedge of interest rate risk, the equivalent change in fair value is reflected within *Other assets* or *Other liabilities*. If the portfolio hedge relationship is terminated for reasons other than the derecognition of the hedged item, the amount included in *Other assets* or *Other liabilities* is amortized to the income statement over the remaining term to maturity of the hedged items using the straight-line method.

### Cash flow hedges

Fair value gains or losses associated with the effective portion of derivatives designated as cash flow hedges for cash flow repricing risk are recognized initially in *Other comprehensive income* within *Equity*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to the income statement.

If a cash flow hedge of forecast transactions is no longer considered effective, or if the hedge relationship is terminated, the cumulative gains or losses on the hedging derivatives previously reported in *Equity* remain there until the committed or forecast transactions occur and affect profit or loss. If the forecast transactions are no longer expected to occur, the deferred gains or losses are reclassified immediately to the income statement.

### Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized directly in *Equity* (and presented in the statement of changes in equity and statement of comprehensive income under *Foreign currency translation*), while any gains or losses relating to the ineffective and / or undesignated portion (for example, the interest element of a forward contract) are recognized in the income statement. Upon disposal or partial disposal of the foreign operation, the cumulative value of any such gains or losses recognized in *Equity* associated with the entity is reclassified to the income statement.

### Economic hedges that do not qualify for hedge accounting

Derivative instruments that are transacted as economic hedges, but do not qualify for hedge accounting, are treated in the same way as derivative instruments used for trading purposes (i.e., realized and unrealized gains and losses are recognized in *Net trading income*), except for the forward points on certain short duration foreign exchange contracts, which are reported in *Net interest income*.

→ Refer to Note 12 for more information

## Note 1 Summary of significant accounting policies (continued)

### I. Embedded derivatives

Derivatives may be embedded in other financial instruments (host contracts). For example, they could be represented by the conversion feature embedded in a convertible bond. Such hybrid instruments arise predominantly from the issuance of certain structured debt instruments. An embedded derivative is generally required to be separated from the host contract and accounted for as a standalone derivative instrument at fair value through profit or loss if (i) the host contract is not carried at fair value with changes in fair value reported in the income statement, (ii) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract and (iii) the terms of the embedded derivative would meet the definition of a standalone derivative, were they contained in a separate contract.

Typically, UBS applies the fair value option to hybrid instruments (refer to item 3b in this Note for more information), in which case bifurcation of an embedded derivative component is not required.

### m. Financial liabilities

#### Debt issued

Debt issued is carried at amortized cost, including contingent capital instruments that contain contractual provisions under which the principal amounts would be written down upon either a specified CET1 ratio breach or a determination by FINMA that a viability event has occurred. Such contractual provisions are not derivatives as the underlying is deemed to be a non-financial variable specific to a party to the contract. Where there is a legal bail-in mechanism for write-down or conversion into equity (as is the case, for instance, with senior unsecured debt issued by the Group that is subject to write-down or conversion under resolution authority granted to FINMA under Swiss law), such mechanism does not form part of the contractual terms and, therefore, also does not affect the amortized cost accounting treatment applied to these instruments. If the debt were to be written down or converted into equity in a future period, this would result in the full or partial derecognition of the financial liabilities, with the difference between the carrying value of the debt written down or converted into equity and the fair value of any equity shares issued recognized in the income statement.

In cases where, as part of the Group's risk management activity, fair value hedge accounting is applied to fixed-rate debt instruments carried at amortized cost, their carrying amount is adjusted for changes in fair value related to the hedged exposure. Refer to item 3k for more information on hedge accounting.

Debt issued and subsequently repurchased in relation to market-making or other activities is treated as redeemed. A gain or loss on redemption (depending on whether the repurchase price of the bond is lower or higher than its carrying value) is recorded in *Other income*. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

#### Financial liabilities designated at fair value

UBS uses the fair value option to designate certain issued debt instruments as financial liabilities designated at fair value through profit or loss, on the basis that such financial instruments include embedded derivatives and / or are managed on a fair value basis (refer to item 3b in this Note for more information).

### n. Own credit

From 1 January 2016 onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings* and will not be reclassified to the income statement in future periods.

### o. Loan commitments

Loan commitments are arrangements under which clients can borrow stipulated amounts under defined terms and conditions.

Loan commitments that can be canceled at any time by UBS at its discretion are neither recognized on the balance sheet nor included in off-balance sheet disclosures.

Loan commitments that cannot be canceled by UBS once the commitments are communicated to the beneficiary or which are revocable only due to automatic cancellation upon deterioration in a borrower's creditworthiness are considered irrevocable and are classified as (i) *derivative loan commitments* measured at fair value through profit or loss, (ii) *loan commitments designated at fair value through profit or loss* or (iii) *other loan commitments*. Other loan commitments are not recorded on the balance sheet, but a provision is recognized through profit or loss if it is probable that a loss has been incurred and a reliable estimate of the amount of the obligation can be made. Any change in the liability relating to these other loan commitments is recorded in the income statement in *Credit loss expense / recovery*.

When a client draws on a commitment, the resulting loan is classified as a (i) *trading asset*, consistent with the associated *derivative loan commitment*, (ii) *financial asset designated at fair value through profit or loss*, consistent with the *loan commitment designated at fair value through profit or loss* or as a (iii) *loan*, when the associated loan commitment is accounted for as *other loan commitment*.

### p. Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for an incurred loss because a specified debtor fails to make payments when due in accordance with the terms of a specified debt instrument. UBS issues such financial guarantees to banks, financial institutions and other parties on behalf of clients to secure loans, overdrafts and other banking facilities.

Certain issued financial guarantees that are managed on a fair value basis are designated at fair value through profit or loss.

## Note 1 Summary of significant accounting policies (continued)

Financial guarantees that are not managed on a fair value basis are initially recognized in the financial statements at fair value and are subsequently measured at the higher of the amount initially recognized less cumulative amortization and, to the extent a payment under the guarantee has become probable, the present value of the expected payment. Any change in the liability relating to probable expected payments resulting from guarantees is recorded in the income statement in *Credit loss expense / recovery*.

### 4) Fee income

UBS earns fee income from a diverse range of services it provides to its clients. Fee income can be divided into two broad categories: (i) fees earned from services that are provided over a certain period of time, such as portfolio management and advisory fees, and (ii) fees earned from providing transaction-type services, such as underwriting fees, corporate finance fees and brokerage fees.

Fees earned from services that are provided over a certain period of time are recognized ratably over the service period, with the exception of performance-linked fees or fee components with specific performance criteria. Such fees are recognized when, as of the reporting date, the performance benchmark has been met and when collectibility is reasonably assured.

Fees earned from providing transaction-type services are recognized when the service has been completed and the fee is fixed or determinable, i.e., not subject to refund or adjustment.

Fee income generated from providing a service that does not result in the recognition of a financial instrument is presented within *Net fee and commission income*. Fees generated from the acquisition, issue or disposal of a financial instrument are presented in the income statement in line with the balance sheet classification of that financial instrument.

→ Refer to Note 4 for more information

### 5) Cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents comprise balances with an original maturity of three months or less, including cash, money market paper and balances with central and other banks.

### 6) Share-based and other deferred compensation plans

#### *Share-based compensation plans*

UBS has established share-based compensation plans that are settled in UBS's equity instruments or an amount that is based on the value of such instruments. These awards are generally subject to conditions that require employees to complete a specified period of service and, for performance shares, to satisfy specified performance conditions. Compensation expense is recognized, on a per tranche basis, over the service period based on an estimate of the number of instruments expected to vest

and is adjusted to reflect actual outcomes. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date.

Where no future service is required, such as for employees who are retirement-eligible or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. Such awards may remain forfeitable until the legal vesting date if certain non-vesting conditions are not met. For equity-settled awards, forfeiture events resulting from breach of a non-vesting condition do not result in an adjustment to expense.

Compensation expense is measured by reference to the fair value of the equity instruments on the date of grant adjusted, when relevant, to take into account the terms and conditions inherent in the award, including dividend rights, transfer restrictions in effect beyond the vesting date, and non-vesting conditions. For equity-settled instruments, fair value is determined at the date of grant and is not remeasured unless its terms are modified such that the fair value immediately after modification exceeds the fair value immediately prior to modification. Any increase in fair value resulting from a modification is recognized as compensation expense, either over the remaining service period or, for vested awards, immediately. For cash-settled awards, fair value is remeasured at each reporting date such that the cumulative expense recognized equals the cash distributed.

→ Refer to Note 27 for more information

#### *Other compensation plans*

UBS has established deferred compensation plans that are settled in cash or financial instruments other than UBS equity, the amount of which may be fixed or may vary based on the achievement of specified performance conditions or the value of specified underlying assets. Compensation expense is recognized over the period that the employee provides services to become entitled to the award. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date. Where no future service is required, such as for employees who are retirement-eligible or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. The amount recognized is based on the present value of the amount expected to be paid under the plan and is remeasured at each reporting date, so that the cumulative expense recognized equals the cash or the fair value of respective financial instruments distributed.

→ Refer to Note 27 for more information

## Note 1 Summary of significant accounting policies (continued)

### 7) Pension and other post-employment benefit plans

UBS sponsors various post-employment benefit plans for its employees worldwide, which include defined benefit and defined contribution pension plans, and other post-employment benefits such as medical and life insurance benefits that are payable after the completion of employment.

→ Refer to Note 26 for more information

#### *Defined benefit pension plans*

Defined benefit pension plans specify an amount of benefit that an employee will receive, which usually depends on one or more factors, such as age, years of service and compensation. The defined benefit liability recognized in the balance sheet is the present value of the defined benefit obligation less the fair value of the plan assets at the balance sheet date with changes resulting from remeasurements recorded immediately in *Other comprehensive income*. If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. UBS applies the projected unit credit method to determine the present value of its defined benefit obligations, the related current service cost and, where applicable, past service cost. The projected unit credit method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. These amounts, which take into account the specific features of each plan, including risk sharing between employee and employer, are calculated periodically by independent qualified actuaries.

#### *Critical accounting estimates and judgments*

The net defined benefit liability or asset at the balance sheet date and the related personnel expense depend on the expected future benefits to be provided, determined using a number of economic and demographic assumptions. A range of assumptions could be applied, and different assumptions could significantly alter the defined benefit liability or asset and pension expense recognized. The most significant assumptions include life expectancy, the discount rate, expected salary increases, pension increases and, in addition for the Swiss plan and one of the US defined benefit pension plans, interest credits on retirement savings account balances. Life expectancy is determined by reference to published mortality tables. The discount rate is determined by reference to the rates of return on high-quality fixed-income investments of appropriate currency and term at the measurement date. The assumption for salary increases reflects the long-term expectations for salary growth and takes into account historical salary development by age groups, expected inflation and expected supply and demand

in the labor market. A sensitivity analysis for reasonable possible movements in each significant assumption for UBS's post-employment obligations is provided within Note 26.

#### *Defined contribution plans*

A defined contribution plan is a pension plan under which UBS pays fixed contributions into a separate entity from which post-employment and other benefits are paid. UBS has no legal or constructive obligation to pay further contributions if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. UBS's contributions are expensed when the employees have rendered services in exchange for such contributions. This is generally in the year of contribution. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

#### *Other post-employment benefits*

UBS also provides post-employment medical insurance benefits to certain retirees in the US and the UK. The expected costs of these benefits are recognized over the period of employment using the same accounting methodology used for defined benefit pension plans.

### 8) Income taxes

UBS is subject to the income tax laws of Switzerland and those of the non-Swiss jurisdictions in which UBS has business operations.

The Group's provision for income taxes is composed of current and deferred taxes. Current income taxes represent taxes to be paid or refunded for the current period or previous periods.

Deferred taxes are recognized for temporary differences between the carrying amounts and tax bases of assets and liabilities that will result in taxable or deductible amounts in future periods and are measured using the applicable tax rates and laws that have been enacted or substantively enacted by the end of the reporting period and which will be in effect when such differences are expected to reverse.

Deferred tax assets arise from a variety of sources, the most significant being: (i) tax losses that can be carried forward to be used against profits in future years and (ii) expenses recognized in the Group's income statement that are not deductible until the associated cash flows occur. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profits will be available against which these differences can be used. When an entity or tax group has a history of recent losses, deferred tax assets are only recognized to the extent there are sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized.

## Note 1 Summary of significant accounting policies (continued)

Deferred tax liabilities are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet that reflect the expectation that certain items will give rise to taxable income in future periods.

Deferred and current tax assets and liabilities are offset when (i) they arise in the same tax reporting group, (ii) they relate to the same tax authority, (iii) the legal right to offset exists and (iv) they are intended to be settled net or realized simultaneously.

Current and deferred taxes are recognized as income tax benefit or expense in the income statement except for current and deferred taxes recognized (i) upon the acquisition of a subsidiary, (ii) for unrealized gains or losses on financial instruments that are classified as available for sale, (iii) for changes in fair value of derivative instruments designated as cash flow hedges, (iv) for remeasurements of defined benefit plans, (v) for certain foreign currency translations of foreign operations and (vi) for gains and losses on the sale of treasury shares. Amounts relating to points (ii), (iii), (iv) and (v) are recognized in *Other comprehensive income* within *Equity*.

### Critical accounting estimates and judgments

Tax laws are complex and judgment and interpretations about the application of such laws are required when accounting for income taxes. UBS considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

The level of deferred tax asset recognition is influenced by management's assessment of UBS's future profitability based on relevant business plan forecasts. Existing assessments are reviewed and, if necessary, revised to reflect changed circumstances. This review is conducted annually, in the second half of each year, but adjustments may be made at other times, if required. In a situation where recent losses have been incurred, convincing evidence that there will be sufficient future profitability is required.

If profit forecast assumptions in future periods deviate from the current outlook, the value of UBS's deferred tax assets may be affected. Any increase or decrease in the carrying amount of deferred tax assets would primarily be recognized through the income statement but would not affect cash flows.

Judgment is also required to forecast the expected outcome of uncertain tax positions that may require the interpretation of tax laws and the resolution of any income tax-related appeals or litigation that are incorporated into the estimate of income and deferred tax.

→ Refer to Note 8 for more information

### 9) Investment in associates

Entities where UBS has significant influence over the financial and operating policies of the entity, but does not have control, are classified as investments in associates and accounted for under the equity method of accounting. Typically, UBS has significant influence when it holds or has the ability to hold between 20% and 50% of a company's voting rights. Investments in associates are initially recognized at cost, and the carrying amount is increased or decreased after the date of acquisition to recognize the Group's share of the investee's comprehensive income and any impairment losses.

The net investment in an associate is impaired if there is objective evidence of a loss event and the carrying value of the investment in the associate is below its recoverable amount.

→ Refer to Note 28 for more information

### 10) Property, equipment and software

Property, equipment and software includes own-used properties, leasehold improvements, information technology hardware, externally purchased and internally generated software, as well as communication and other similar equipment. Property, equipment and software is carried at cost less accumulated depreciation and impairment losses and is reviewed at each reporting date for indication for impairment. Software development costs are capitalized only when the costs can be measured reliably and it is probable that future economic benefits will arise. Depreciation of property, equipment and software begins when they are available for use, that is, when they are in the location and condition necessary for them to be capable of operating in the manner intended by management. Depreciation is calculated on a straight-line basis over an asset's estimated useful life. The estimated useful economic lives of UBS's property, equipment and software are:

- properties, excluding land: ≤ 67 years
- IT hardware and communication equipment: ≤ 7 years
- other machines and equipment: ≤ 10 years
- software: ≤ 10 years
- leasehold improvements: shorter of the lease term or the economic life of asset (typically ≤ 20 years)

→ Refer to Note 14 for more information



## Note 1 Summary of significant accounting policies (continued)

### 11) Goodwill and intangible assets

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of net identifiable assets of the acquired entity at the date of the acquisition. Goodwill is not amortized, but at the end of each reporting period or when indicators of impairment exist, UBS assesses whether there is any indication that goodwill is impaired. If such indicators exist, UBS is required to test the goodwill for impairment. Irrespective of whether there is any indication of impairment, UBS tests goodwill for impairment annually. UBS considers the segments, as reported in Note 2a, as separate cash-generating units, since this is the level at which the performance of investments is reviewed and assessed by management. The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, to the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of UBS's goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce net profit and equity, but would not affect cash flows.

Intangible assets are comprised of separately identifiable intangible items arising from business combinations and certain purchased trademarks and similar items. Intangible assets are recognized at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Intangible assets with a finite useful life are amortized using the straight-line method over their estimated useful life, generally not exceeding 20 years. In rare cases, intangible assets can have an indefinite useful life, in which case they are not amortized. At each reporting date, intangible assets are reviewed for indications of impairment. If such indications exist, the intangible assets are analyzed to assess whether their carrying amount is fully recoverable. An impairment loss is recognized if the carrying amount exceeds the recoverable amount.

#### Critical accounting estimates and judgments

UBS's methodology for goodwill impairment testing is based on a model that is most sensitive to the following key assumptions: (i) forecasts of earnings available to shareholders in years one to three, (ii) changes in the discount rates and (iii) changes in the long-term growth rate. Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Refer to Note 15 for the discussion of how the reasonably possible changes in those key assumptions may affect the results delivered by UBS's model for goodwill impairment testing.

→ Refer to Notes 2 and 15 for more information

### 12) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing or amount, and are recognized when (i) UBS has a present obligation as a result of a

past event, (ii) it is probable that an outflow of resources will be required to settle the obligation and (iii) a reliable estimate of the amount of the obligation can be made.

The majority of UBS's provisions relate to litigation, regulatory and similar matters, restructuring, employee benefits, real estate and loan commitments and guarantees.

The Group recognizes provisions for litigation, regulatory and similar matters when, in the opinion of management after seeking legal advice, it is more likely than not that the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against the Group, but are nevertheless expected to be, based on the Group's experience with similar asserted claims.

Restructuring provisions are recognized when a detailed and formal restructuring plan has been approved and a valid expectation has been raised that the restructuring will be carried out, either through commencement of the plan or announcements to affected employees.

Provisions are recognized for lease contracts if the unavoidable costs of a contract exceed the benefits expected to be received under it (onerous lease contracts). For example, this may occur when a significant portion of a leased property is expected to be vacant for an extended period.

Provisions for employee benefits are recognized mainly in respect of service anniversaries and sabbatical leave.

Provisions are recognized at the best estimate of the consideration required to settle the present obligation at the balance sheet date. Such estimates are based on all available information and are revised over time as more information becomes available. If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to settle or discharge the obligation, using a rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

Provisions that are similar in nature are aggregated to form a class, while the remaining provisions, including those of less significant amounts, are presented under *Other provisions*. Provisions are presented separately on the balance sheet and, when they are no longer considered uncertain in timing or amount, are reclassified to *Other liabilities – Other*.

When all conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote, in which case no provision is recognized and no contingent liability is reported. Contingent liabilities are also disclosed for possible obligations that arise from past events whose existence will be confirmed only by uncertain future events not wholly within the control of UBS. Such disclosures are not made if it is not practicable to do so.

## Note 1 Summary of significant accounting policies (continued)

### *Critical accounting estimates and judgments*

Recognition of provisions often involves significant judgment in assessing the existence of an obligation that results from past events and in estimating the probability, timing and amount of any outflows of resources. This is particularly the case for litigation, regulatory and similar matters, which, due to their nature, are subject to many uncertainties making their outcome difficult to predict. Such matters may involve unique fact patterns or novel legal theories, proceedings that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Determining whether an obligation exists as a result of a past event and estimating the probability, timing and amount of any potential outflows is based on a variety of assumptions, variables, and known and unknown uncertainties.

The amount of any provision recognized is sensitive to the assumptions used and there could be a wide range of possible outcomes for any particular matter.

Statistical or other quantitative analytical tools are of limited use in determining whether to establish or determine the amount of provisions in the case of litigation, regulatory or similar matters. Furthermore, information currently available to management may be incomplete or inaccurate, increasing the risk of erroneous assumptions with regard to the future development of such matters. Management regularly reviews all the available information regarding such matters, including legal advice, which is a significant consideration, to assess whether the recognition criteria for provisions have been satisfied and to determine the timing and amount of any potential outflows.

→ Refer to Note 20 for more information

### 13) Foreign currency translation

Transactions denominated in a foreign currency are translated into the functional currency of the reporting entity at the spot exchange rate on the date of the transaction. At the balance sheet date, all monetary assets and liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction. Foreign currency translation differences on non-monetary financial assets classified as available for sale are generally recorded directly in *Equity* until the asset is sold or becomes impaired. However, translation differences on available-for-sale monetary financial assets are reported in *Net trading income* on an amortized-cost basis, along with all other foreign currency translation differences on monetary assets and liabilities.

Upon consolidation, assets and liabilities of foreign operations are translated into Swiss francs (CHF), UBS's presentation currency, at the closing exchange rate on the balance sheet date, and income and expense items are translated at the average rate for the period. The resulting foreign currency translation differences attributable to shareholders are recognized directly in *Foreign currency translation* within *Equity*, which forms part of *Total equity attributable to shareholders*, whereas the foreign currency translation differences attributable to non-controlling interests are shown within *Equity attributable to non-controlling interests*.

When a foreign operation is disposed or partially disposed of and UBS loses control over the foreign operation, the cumulative amount of foreign currency translation differences within *Total equity attributable to shareholders* and *Equity attributable to non-controlling interests* related to that foreign operation is reclassified to the income statement as part of the gain or loss on disposal. When UBS disposes of a portion of its interest in a subsidiary that includes a foreign operation but retains control, the related portion of the cumulative currency translation balance is reclassified to *Equity attributable to non-controlling interests*.

→ Refer to Note 34 for more information

### 14) Equity, treasury shares and contracts on UBS Group AG shares

#### *Non-controlling interests*

*Net profit* is split into *Net profit attributable to shareholders* and *Net profit attributable to non-controlling interests* (including net profit attributable to preferred noteholders, if any). Similarly, *Equity* is split into *Equity attributable to shareholders* and *Equity attributable to non-controlling interests* (including equity attributable to preferred noteholders, if any).

#### *UBS Group AG shares held (treasury shares)*

UBS Group AG shares held by the Group are presented in *Equity* as *Treasury shares* at their acquisition cost and are deducted from *Equity* until they are canceled or reissued. The difference between the proceeds from sales of treasury shares and their weighted average cost (net of tax, if any) is reported as *Share premium*.

#### *Net cash settlement contracts*

Contracts on UBS Group AG shares that require net cash settlement, or provide the counterparty or UBS with a settlement option that includes a choice of settling net in cash, are classified as held for trading derivatives, with changes in fair value reported in the income statement as *Net trading income*.

## Note 1 Summary of significant accounting policies (continued)

### 15) Leasing

UBS enters into lease contracts, or contracts that include lease components, predominantly of premises and equipment, and primarily as lessee. Leases that transfer substantially all the risks and rewards, but not necessarily legal title in the underlying assets, are classified as finance leases. All other leases are classified as operating leases. UBS is not a lessee in any material finance leases.

Lease contracts classified as operating leases where UBS is the lessee include non-cancelable long-term leases of office buildings in most UBS locations. Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences with control of the physical use of the property. Lease incentives are treated as a reduction of rental expense and are recognized on a consistent basis over the lease term.

Where UBS acts as lessor under a finance lease, a receivable is recognized in *Loans* at an amount equal to the present value of the aggregate of the minimum lease payments plus any

unguaranteed residual value that UBS expects to recover at the end of the lease term. Initial direct costs are also included in the initial measurement of the lease receivable. Lease payments received during the lease term are allocated to repayment of the outstanding receivable and interest income to reflect a constant periodic rate of return on UBS's net investment using the interest rate implicit in the lease. UBS reviews the estimated unguaranteed residual value annually, and if the estimated residual value to be realized is less than the amount assumed at lease inception, a loss is recognized for the expected shortfall.

Certain arrangements do not take the legal form of a lease but convey a right to use an asset in return for a payment or series of payments. For such arrangements, UBS determines at the inception of the arrangement whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets, and if so, the arrangement is accounted for as a lease.

→ Refer to Notes 10 and 31 for more information

## b) Changes in accounting policies, comparability and other adjustments

### *Presentation of interest income and expense on derivatives designated as hedging instruments*

Effective 1 January 2017, UBS refined the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships to align the presentation with interest arising from designated hedged items. As a result of this presentation change:

- *Interest income from loans and deposits* and *Interest expense on debt issued* for the year ended 31 December 2017 were each CHF 530 million lower, with no change to *Net interest income*.
- Interest income from derivative instruments designated as cash flow hedges, previously included within *Interest income from loans and deposits*, is now separately disclosed within Note 3.

Prior-period information has not been restated, as the effect was not material.

→ Refer to Note 3 for more information

### *Amendments to IAS 7, Statement of Cash Flows*

UBS adopted amendments to IAS 7, *Statement of Cash Flows*, in 2017 and now separately discloses the drivers of changes in financial liabilities arising from financing activities, including changes arising from cash flows and non-cash changes, in its statement of cash flows.

→ Refer to the statement of cash flows for more information

→ Refer to the "Balance sheet, liquidity and funding management" section of this report for information on liabilities and funding management

### *Amendments to IAS 12, Income Taxes*

In 2017, UBS adopted amendments to IAS 12, *Income Taxes*, that clarify how to account for deferred tax assets related to debt instruments measured at fair value. The adoption of these amendments did not have a material impact on the Group's financial statements.

## Note 1 Summary of significant accounting policies (continued)

### c) International Financial Reporting Standards and Interpretations to be adopted in 2018 and later and other changes

#### Effective from 2018

##### *Changes in segment reporting*

Effective 1 February 2018, UBS integrated its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division, which is managed on an integrated basis, with a single set of key performance indicators, performance targets, operating plan and management structure. Consistent with this, the operating results of Global Wealth Management will be presented and assessed on an integrated basis in internal management reports to the Group Executive Board, which is considered the "chief operating decision maker" pursuant to IFRS 8, *Operating Segments*. Consequently, beginning from the first quarter of 2018, Global Wealth Management qualifies as an operating and reportable segment for the purposes of segment reporting and will be presented alongside Personal & Corporate Banking, Asset Management, the Investment Bank, and Corporate Center (with its units Services, Group Asset and Liability Management (Group ALM) and Non-core and Legacy Portfolio).

##### *IFRS 9, Financial Instruments*

IFRS 9, *Financial Instruments* is effective from 1 January 2018 and will be applicable from UBS's first quarter 2018 reporting. IFRS 9 reflects the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39, *Financial Instruments: Recognition and Measurement*. In addition, UBS will early adopt the Amendment to IFRS 9, *Prepayment Features with Negative Compensation*, issued in October 2017, which allows the Group to continue to apply amortized cost accounting to Swiss private mortgages and corporate loans that provide for two-way compensation if a prepayment occurs.

##### *Classification and measurement*

IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, at fair value through other comprehensive income (OCI) or at fair value through profit or loss, based on the business model for managing the respective financial assets and their contractual cash flow characteristics. If a financial asset meets the criteria to be measured at amortized cost or at fair value through OCI, it can be designated at fair value through profit or loss if doing so would significantly reduce or eliminate an accounting mismatch. Equity instruments that are not held for trading may be accounted for at fair value through OCI, with no subsequent reclassification of realized gains or losses to the income statement under any circumstances, while all other equity instruments will be accounted for at fair value through profit or loss.

For UBS, the most significant IFRS 9 classification and measurement changes on transition are due to the following:

- financial assets that will no longer qualify for amortized cost accounting under IFRS 9 will be classified at fair value through profit or loss because their cash flow characteristics do not satisfy the solely payments of principal and interest criteria (e.g., auction rate securities and certain brokerage receivables);
- lending arrangements that no longer qualify for amortized cost accounting under IFRS 9 will be classified at fair value through profit or loss because the business model within which they are managed does not have an objective to hold financial assets in order to collect the contractual cash flows (e.g., certain Investment Bank lending arrangements);
- equity instruments classified as available for sale under IAS 39 will be classified at fair value through profit or loss under IFRS 9; and
- financial liabilities will be newly designated under IFRS 9 at fair value through profit or loss, from amortized cost accounting, to align with conclusions reached for associated financial assets that will be measured at fair value through profit or loss (e.g., brokerage payables).

IFRS 9 classification and measurement requirements for financial liabilities are unchanged from IAS 39, except that any gain or loss arising on a financial liability designated at fair value through profit or loss that is attributable to changes in the issuer's own credit risk (own credit) is presented in OCI and not recognized in the income statement. UBS early adopted the own credit presentation change from 1 January 2016.

##### *Expected credit losses*

IFRS 9 introduces an approach for determining impairment based on forward-looking expected credit losses (ECLs), which is intended to result in an earlier recognition of credit losses compared with the existing incurred-loss impairment approach for financial instruments in IAS 39, and the loss-provisioning approach for financial guarantees and loan commitments in IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. The new impairment model applies to financial assets measured at amortized cost, debt instruments measured at fair value through OCI, lease receivables, and financial guarantee contracts and loan commitments that are not measured at fair value through profit or loss.

## Note 1 Summary of significant accounting policies (continued)

Expected credit losses will be recognized on the following basis:

- A maximum of 12-month ECLs are required to be recognized from initial recognition, reflecting the portion of lifetime cash shortfalls that will result if a default occurs in the 12 months after the reporting date (or a shorter period if the expected life is less), weighted by the risk of that default occurring. Respective instruments are referred to as instruments in stage 1.
- Lifetime ECLs are required to be recognized if a significant increase in credit risk (SICR) is detected subsequent to the instrument's initial recognition, reflecting lifetime cash shortfalls that will result from all possible default events over the expected life of a financial instrument, weighted by the risk of default occurring. Respective instruments are referred to as instruments in stage 2. Where an SICR is no longer observed, the instrument will move back to stage 1.
- Lifetime ECLs are always recognized for credit-impaired financial instruments, referred to as instruments in stage 3. The IFRS 9 determination of whether an instrument is credit impaired will follow substantially the same principles used to determine whether an instrument is impaired under IAS 39, i.e., is based on the occurrence of one or more loss events. However, the ECL for credit-impaired financial instruments under IFRS 9 may differ mainly due to additional forward-looking considerations required under IFRS 9. Credit-impaired exposures may include positions for which no loss has occurred or no allowance has been recognized, for example because they are expected to be fully recoverable through the collateral held. Instruments that are no longer credit impaired move back to stage 2 or stage 1.
- Changes in lifetime ECLs since initial recognition are also recognized for instruments that are purchased or originated credit impaired.

The methodology applied will calculate an individual probability-weighted unbiased ECL in line with the complexity, structure and risk profile of relevant portfolios. The following principal factors will be applied: probability of default (PD), loss given default (LGD), exposure at default (EAD) and discounting of cash flows to the reporting date, alongside an evaluation of a range of possible outcomes, forecasts of future economic conditions and information on past events and current conditions.

PDs and LGDs used in the ECL calculation will be point in time (PIT) based and consider a range of scenarios (upside, baseline, mild downside, downside) to capture material non-linearity and asymmetries, and scenario weights will be applied to reflect a likelihood of their occurrence.

UBS will measure ECL over the maximum contractual period it is exposed to credit risk, taking into account contractual extension, termination and prepayment options. For certain credit card facilities without a defined contractual end date, which are callable on demand and where the drawn and

undrawn portions are managed as one unit, the period over which UBS is exposed to credit risk exceeds the contractual notice period and therefore this longer period is used within the ECL calculation.

Qualitative and quantitative criteria are used to determine whether the credit risk on a particular instrument has significantly increased from its initial recognition. UBS will assess changes in an instrument's risk of default primarily based on a comparison of the annualized forward-looking and scenario-weighted lifetime PIT-based PDs at inception of the instrument and the reporting date. Additional qualitative information is considered, including internal indicators of credit risk such as days-past-due information, external market indicators of credit risk and general economic conditions, to detect significant increases in credit risk.

IFRS 9 does not provide an explicit definition of default. For the purpose of measuring expected credit losses, UBS will apply a definition of default that is consistent with the definition used in capital calculations and by internal credit risk management.

Overall, the level of credit losses is expected to increase under IFRS 9 alongside additional income statement volatility due to the use of forward-looking assumptions and the application of the SICR approach.

### *Hedge accounting*

IFRS 9 also includes an optional revised hedge accounting model, which further aligns the accounting treatment with the risk management practices. As permitted by the standard, UBS will not adopt the optional IFRS 9 hedge accounting requirements pending completion of the International Accounting Standards Board's project on macro hedge accounting strategies.

However, new mandatory hedge accounting disclosures will be adopted on 1 January 2018 as required, providing additional information on UBS's hedging strategies by hedged risk and hedge type.

### *Transition*

In line with transitional provisions in IFRS 9, UBS will recognize an estimated pre-tax transition impact of CHF 0.7 billion, as well as a tax credit of CHF 0.1 billion, resulting in a net reduction of CHF 0.6 billion in UBS's IFRS consolidated equity. Approximately half of this amount is attributable to the classification and measurement changes, arising predominantly from the change in measurement basis of certain financial assets that no longer qualify for amortized cost accounting due to their cash flow characteristics. The remainder of the reduction results from recognizing expected credit losses on all in-scope transactions, with the majority of the impact driven by the private and commercial mortgage portfolio in Switzerland within the Group's Personal & Corporate Banking division. As permitted by IFRS 9, UBS will not restate prior-period data.

## Note 1 Summary of significant accounting policies (continued)

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### Presentation

*Presentation of interest income:* In line with consequential amendments to IAS 1, *Presentation of Financial Statements*, from 1 January 2018, UBS will present interest income calculated using the effective interest method on assets that are subsequently measured at amortized cost and debt instruments that are measured at fair value through OCI separately in the income statement.

*Presentation of balance sheet:* Effective with UBS's first quarter 2018 reporting, UBS will make a series of presentational changes to the IFRS balance sheet reflecting the implementation of IFRS 9, alongside consequential changes to improve comparability with prior periods. The primary changes include:

- IAS 39-specific asset categories such as "Financial assets held to maturity" and "Financial assets available for sale" will be superseded by the new categories "Financial assets measured at amortized cost" and "Financial assets measured at fair value through other comprehensive income (FVOCI)."
- A new category "Financial assets at fair value not held for trading" will be created to accommodate in particular financial assets previously designated at fair value, all of which are to be mandatorily classified at fair value through profit or loss given the assets are managed on a fair value basis.
- *Brokerage receivables* and *Brokerage payables designated at fair value* will be presented as separate line items, whereas they are presented within *Other assets* and *Other liabilities*, respectively, as of 31 December 2017.
- *Other assets* and *Other liabilities* will be split between measured at amortized cost, measured at fair value through profit or loss and other non-financial assets and liabilities.
- *Cash collateral on securities borrowed* and *Reverse repurchase agreements* will be combined into a single line, "Receivables from securities financing transactions". Similarly, *Cash collateral on securities lent* and *Repurchase agreements* will be combined into a single line, "Payables from securities financing transactions".
- Financial liabilities designated at fair value will be split into two lines, "Debt issued designated at fair value" and "Other financial liabilities designated at fair value".

The table on the next page illustrates the new balance sheet presentation of assets and liabilities in comparison with our current presentation. The presentation of the components of equity will not change, and therefore for illustration purposes total liabilities and equity are presented in a single line in the table on the next page. To support comparability, we will present prior-period information for periods ending before 1 January 2018 in this revised structure, beginning with the first quarter 2018 financial report. This table does not reflect any of the effects of adoption from the classification and measurement requirements of IFRS 9, *Financial Instruments*, which are only applicable for the periods ending after 1 January 2018. As permitted by the standard, we will not restate prior periods for classification and measurement or ECL changes with the adoption of IFRS 9.

## Note 1 Summary of significant accounting policies (continued)

### 2018 balance sheet presentation changes

<i>CHF million</i>	31.12.17 Presentation in the 2017 financial statements	31.12.17 Revised presentation applicable beginning 2018
<b>Assets</b>		
Cash and balances at central banks	87,775	87,775
Loans and advances to banks (formerly: Due from banks)	13,739	13,739
Receivables from securities financing transactions (new line)		89,633
Cash collateral on securities borrowed (newly included in Receivables from securities financing transactions)	12,393	
Reverse repurchase agreements (newly included in Receivables from securities financing transactions)	77,240	
Cash collateral receivables on derivative instruments	23,434	23,434
Loans and advances to customers (formerly: Loans)	319,568	318,509
Financial assets held to maturity (superseded)	9,166	
Other financial assets measured at amortized cost (new line)		36,861
<b>Total financial assets measured at amortized cost</b>		<b>569,950</b>
Financial assets at fair value held for trading (formerly: Trading portfolio assets)	130,707	126,144
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	<i>35,363</i>	<i>35,363</i>
Derivative financial instruments (formerly: Positive replacement values)	118,227	118,227
Brokerage receivables (new line, formerly included within Other assets)	n/a	n/a
Financial assets at fair value not held for trading (new line)		58,933
Financial assets designated at fair value	58,933	
<b>Total financial assets measured at fair value through profit or loss</b>		<b>303,304</b>
Financial assets available for sale (superseded)	8,665	
<b>Financial assets measured at fair value through other comprehensive income (new line)<sup>1</sup></b>		<b>8,665</b>
Investments in associates	1,018	1,018
Property, equipment and software	8,829	8,829
Goodwill and intangible assets	6,398	6,398
Deferred tax assets	9,844	9,844
Other non-financial assets (new line)		7,633
<b>Total non-financial assets</b>		<b>33,722</b>
Other assets (superseded)	29,706	
<b>Total assets</b>	<b>915,642</b>	<b>915,642</b>
<b>Liabilities</b>		
Amounts due to banks	7,533	7,533
Payables from securities financing transactions (new line)		17,044
Cash collateral on securities lent (newly included in Payables from securities financing transactions)	1,789	
Repurchase agreements (newly included in Payables from securities financing transactions)	15,255	
Cash collateral payables on derivative instruments	30,247	30,247
Customer deposits (formerly: Due to customers)	408,999	408,999
Debt issued measured at amortized cost	139,551	139,551
Other financial liabilities measured at amortized cost (new line)		36,337
<b>Total financial liabilities measured at amortized cost</b>		<b>639,711</b>
Financial liabilities at fair value held for trading (formerly: Trading portfolio liabilities)	30,463	30,463
Derivative financial instruments (formerly: Negative replacement values)	116,133	116,133
Brokerage payables designated at fair value (new line, formerly included within Other liabilities)	n/a	n/a
Financial liabilities designated at fair value (superseded)	54,202	
Debt issued designated at fair value (new line)		49,502
Other financial liabilities designated at fair value (new line)		16,223
<b>Total financial liabilities measured at fair value through profit or loss</b>		<b>212,322</b>
Provisions	3,133	3,133
Other non-financial liabilities (new line)		9,205
<b>Total non-financial liabilities</b>		<b>12,338</b>
Other liabilities (superseded)	57,064	
<b>Total liabilities</b>	<b>864,371</b>	<b>864,371</b>
<b>Total liabilities and equity</b>	<b>915,642</b>	<b>915,642</b>

<sup>1</sup> Consists of debt instruments.

## Note 1 Summary of significant accounting policies (continued)

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### *IFRS 15, Revenue from Contracts with Customers*

UBS will adopt IFRS 15, *Revenue from Contracts with Customers*, which replaces IAS 18, *Revenue* for periods beginning on 1 January 2018. IFRS 15 establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied. In particular, the standard now specifies that variable consideration is only recognized to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

IFRS 15 also provides guidance on when revenues and expenses should be presented on a gross or net basis and establishes a cohesive set of disclosure requirements for information on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

UBS will adopt the standard on a modified retrospective basis that does not require comparatives to be restated. Instead, the cumulative effect of initially applying the standard will be recognized as an adjustment to the opening balance of retained earnings. The transition adjustment will not be material.

IFRS 15 will result in a deferral of some performance-based fees in Asset Management and research revenues in the Investment Bank. However, the impact on Group's revenues is not expected to be material.

UBS will also present certain fee and commission income and expense on a gross basis, rather than net basis, if UBS is acting as a principal. *Fee and commission income* will be reported in the income statement separately from *Fee and commission expense*. The supporting note disclosure for fee and commission income will be enhanced to provide more information on the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers.

### *IAS 28, Investments in Associates and Joint Ventures*

In October 2017, the IASB issued an amendment to IAS 28, *Investments in Associates and Joint Ventures* that clarified that IFRS 9 must be applied when accounting for long-term interests in an associate or joint venture to which the equity method of accounting is not applied. The amendment is mandatorily effective for accounting periods beginning on or after 1 January 2019. However, UBS will early adopt this amendment from 1 January 2018 to align with the mandatory application date of IFRS 9, and expects that it will have no material impact on the Group's financial statements.

### *Amendments to IFRS 2, Share-based Payment*

In June 2016, the IASB issued amendments to IFRS 2, *Share-based Payment*, which are mandatorily effective as of 1 January 2018. The amendments clarify that the approach used to account for vesting and non-vesting conditions when measuring cash-settled share-based payments is consistent with that used for equity-settled share-based payments. The amendments also clarify the classification of share-based payments settled net of withholding tax as well as the accounting consequences resulting from a modification of share-based payments from cash-settled to equity-settled. The adoption of these amendments will not have a material impact on the Group's financial statements.

### *IFRIC 22, Foreign Currency Transactions and Advance Consideration*

In December 2016, the IFRS Interpretations Committee of the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration* (IFRIC 22), which clarifies that in circumstances when an advance consideration is received or paid before recognizing an associated asset, expense or income, the exchange rate to be used on initial recognition of the related asset, expense or income is the rate determined as of the date of transaction – i.e., the date of initial recognition of the non-monetary asset or non-monetary liability arising from the receipt or payment of advance consideration. UBS is required to apply IFRIC 22 from 1 January 2018. The adoption of this IFRS Interpretation will not have a material impact on Group's financial statements.

### *Effective from 2019*

### *IFRS 16, Leases*

In January 2016, the IASB issued IFRS 16, *Leases*, which replaces IAS 17, *Leases* and is mandatorily effective as of 1 January 2019. The standard substantially changes how lessees must account for operating lease commitments, requiring a lease liability with a corresponding right-of-use asset to be recognized on the balance sheet, compared with the current off-balance sheet treatment of such leases. UBS expects to report an increase in assets and liabilities from adoption as of 1 January 2019 in line with its disclosure of undiscounted operating lease commitments as set out in Note 31.



## Note 1 Summary of significant accounting policies (continued)

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### *IFRIC 23, Uncertainty over Income Tax Treatments*

In June 2017, the IASB issued IFRIC Interpretation 23, *Uncertainty over Income Tax Treatments* (IFRIC 23), which addresses how uncertain tax positions should be accounted for under IFRS. Under this interpretation, IFRIC 23 requires that, where acceptance of the tax treatment by the relevant tax authority is considered probable, it should be assumed as an accounting recognition matter that treatment of the item will ultimately be accepted. Therefore, no tax provision would be required in such cases. However, if acceptance of the tax treatment is not considered probable, the entity is required to reflect that uncertainty using an expected value (i.e., a probability-weighted approach) or the single most likely amount. IFRIC 23 is mandatorily effective for accounting periods beginning on or after 1 January 2019 and any resulting change to the tax provisions should be recognized in retained earnings. UBS is in the process of assessing the impact of this interpretation, which is not expected to have a material effect on the Group's financial statements.

### *Amendments to IAS 19, Employee Benefits*

In February 2018, the IASB issued amendments to IAS 19, *Employee Benefits*, which address the accounting when a plan amendment, curtailment or settlement occurs during the reporting period. The amendments require entities to use the updated actuarial assumption to determine current service cost and net interest for the remainder of the annual reporting period after such an event. The amendments also clarify how the requirements for accounting for a plan amendment, curtailment or settlement affect the asset ceiling requirements. The amendments are effective prospectively for plan amendments, curtailments or settlements that occur on or after 1 January 2019, with earlier application permitted. UBS does not intend to early adopt this amendment.

### *Annual Improvements to IFRS Standards 2015–2017 Cycle*

In December 2017, the IASB issued *Annual Improvements to IFRS Standards 2015–2017 Cycle*, which resulted in amendments to IFRS 3, *Business Combinations*, IFRS 11, *Joint Arrangements*, IAS 12, *Income Taxes* and IAS 23, *Borrowing Costs*. The amendments are mandatorily effective as of 1 January 2019. UBS expects that the adoption of these amendments will not have a material impact on the Group's financial statements.

## Note 2a Segment reporting

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The operational structure of the Group as of 31 December 2017 was comprised of Corporate Center and five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank.

### Wealth Management

Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world, except those served by Wealth Management Americas. Its clients benefit from the full spectrum of resources that UBS as a global firm can offer, including banking and lending solutions, wealth planning, investment management solutions and corporate finance advice. Wealth Management's guided architecture model gives clients access to a wide range of products from the world's leading third-party institutions that complement its own products.

### Wealth Management Americas

Wealth Management Americas provides advice-based solutions through financial advisors who deliver a fully integrated set of products and services specifically designed to address the needs of their clients. Its business is primarily domestic US but includes Canada and international clients booked in the US.

### Personal & Corporate Banking

Personal & Corporate Banking provides comprehensive financial products and services to private, corporate and institutional clients in Switzerland and is among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Its business is central to UBS's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to help clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for the other business divisions in Switzerland through client referrals. In addition, Personal & Corporate Banking manages a substantial part of UBS's Swiss infrastructure and banking products platform, both of which are leveraged across the Group.

### Asset Management

Asset Management is a large-scale and diversified asset manager, with an onshore presence in 23 countries. It offers investment capabilities and investment styles across all major traditional and alternative asset classes, as well as platform solutions and advisory support, to institutions, wholesale intermediaries and wealth management clients around the world.

### Investment Bank

The Investment Bank provides investment advice, financial solutions and capital market access in over 35 countries, with principal offices in all major financial centers. It serves corporate, institutional and wealth management clients across the globe and partners with UBS's wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services and also includes UBS Securities Research.

### Corporate Center

Corporate Center provides services to the Group through the reporting units Corporate Center – Services and Group Asset and Liability Management (Group ALM). Corporate Center also includes the Non-core and Legacy Portfolio unit.

Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Human Resources, Group Operations, Group Sourcing and Group Technology), Group Finance (excluding Group ALM), Group Legal, Group Risk Control, Group Communications & Branding, Group Regulatory & Governance, and UBS and Society.

Group ALM manages the structural risks of UBS's balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with the Group's liquidity and funding portfolios. Group ALM also seeks to optimize the Group's financial performance by matching assets and liabilities within the context of the Group's liquidity, funding and capital targets and constraints. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into the Group's risk governance framework.

Non-core and Legacy Portfolio manages legacy positions from businesses exited by the Investment Bank, and is overseen by a committee chaired by the Group Chief Risk Officer.

## Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the year ended 31 December 2017</b>									
Net interest income	2,088	1,561	1,916	(32)	1,194	(348)	126	23	6,528
Non-interest income	5,285	6,676	1,772	2,058	6,891	75	(137)	48	22,667
Allocations from CC – Group ALM	256	115	181	18	(344)	120	(264)	(83)	0
Income <sup>1</sup>	7,629	8,353	3,869	2,044	7,740	(153)	(276)	(11)	29,195
Credit loss (expense) / recovery	(4)	(4)	(19)	0	(90)	0	0	(11)	(128)
Total operating income	7,625	8,349	3,850	2,044	7,651	(153)	(276)	(22)	29,067
Personnel expenses	2,354	5,173	836	716	2,949	3,785	34	43	15,889
General and administrative expenses	594	644	290	231	662	4,247	26	114	6,808
Services (to) / from CC and other BDs	2,372	1,282	1,133	514	2,769	(8,281)	(13)	224	0
<i>of which: services from CC – Services</i>	<i>2,294</i>	<i>1,262</i>	<i>1,227</i>	<i>551</i>	<i>2,676</i>	<i>(8,345)</i>	<i>142</i>	<i>194</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	3	2	13	1	10	1,004	0	0	1,033
Amortization and impairment of intangible assets <sup>2</sup>	7	41	0	3	12	7	0	0	70
Total operating expenses <sup>3</sup>	5,330	7,141	2,272	1,466	6,402	762	47	381	23,800
<b>Operating profit / (loss) before tax</b>	<b>2,295</b>	<b>1,208</b>	<b>1,578</b>	<b>578</b>	<b>1,249</b>	<b>(914)</b>	<b>(322)</b>	<b>(403)</b>	<b>5,268</b>
Tax expense / (benefit)									4,139
<b>Net profit / (loss)</b>									<b>1,128</b>
<b>Additional Information</b>									
Total assets	123,003	67,071	135,556	14,269	262,931	20,875	245,737	46,200	915,642
Additions to non-current assets	89	27	15	1	3	1,573	0	0	1,707

<sup>1</sup> Impairments of financial assets available for sale for the year ended 31 December 2017 totaled CHF 15 million, of which CHF 13 million was recorded in Asset Management. <sup>2</sup> Refer to Note 15 for more information. <sup>3</sup> Refer to Note 30 for information on restructuring expenses.

**Note 2a Segment reporting (continued)**

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the year ended 31 December 2016</b>									
Net interest income	1,932	1,347	1,892	(33)	1,006	(322)	589	3	6,413
Non-interest income	4,975	6,320	1,768	1,957	6,953	183	(295)	84	21,944
Allocations from CC – Group ALM	389	118	332	7	(260)	36	(512)	(110)	0
Income <sup>1</sup>	7,296	7,785	3,990	1,931	7,699	(102)	(219)	(23)	28,357
Credit loss (expense) / recovery	(5)	(3)	(6)	0	(11)	0	0	(13)	(37)
Total operating income	7,291	7,782	3,984	1,931	7,688	(102)	(219)	(36)	28,320
Personnel expenses	2,349	4,819	845	727	3,082	3,801	31	66	15,720
General and administrative expenses	640	570	285	241	805	4,145	17	732	7,434
Services (to) / from CC and other BDs	2,348	1,235	1,080	506	2,765	(8,164)	(49)	280	0
<i>of which: services from CC – Services</i>	<i>2,256</i>	<i>1,221</i>	<i>1,186</i>	<i>530</i>	<i>2,675</i>	<i>(8,204)</i>	<i>110</i>	<i>225</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	2	2	15	1	21	944	0	0	985
Amortization and impairment of intangible assets <sup>2</sup>	4	50	0	4	12	21	0	0	91
Total operating expenses <sup>3</sup>	5,343	6,675	2,224	1,479	6,684	747	(1)	1,078	24,230
<b>Operating profit / (loss) before tax</b>	<b>1,948</b>	<b>1,107</b>	<b>1,760</b>	<b>452</b>	<b>1,004</b>	<b>(849)</b>	<b>(218)</b>	<b>(1,114)</b>	<b>4,090</b>
Tax expense / (benefit)									805
<b>Net profit / (loss)</b>									<b>3,286</b>
<b>Additional Information</b>									
Total assets	115,539	65,882	139,912	12,028	242,302	23,669	267,200	68,485	935,016
Additions to non-current assets	26	4	23	1	3	1,759	0	0	1,816

<sup>1</sup> Impairments of financial assets available for sale for the year ended 31 December 2016 totaled CHF 5 million, of which CHF 3 million was recorded in Asset Management. <sup>2</sup> Refer to Note 15 for more information. <sup>3</sup> Refer to Note 30 for information on restructuring expenses.

## Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the year ended 31 December 2015</b>									
Net interest income	1,825	1,067	1,890	(34)	1,573	(340)	730	21	6,732
Non-interest income	5,859	6,213	1,603	2,077	7,526	435	378	(101)	23,990
Allocations from CC – Group ALM	471	104	421	15	(211)	145	(832)	(114)	0
Income <sup>1</sup>	8,155	7,384	3,913	2,057	8,889	241	277	(195)	30,722
Credit loss (expense) / recovery	0	(4)	(37)	0	(68)	0	0	(8)	(117)
Total operating income	8,155	7,381	3,877	2,057	8,821	241	277	(203)	30,605
Personnel expenses	2,532	4,579	873	729	3,220	3,903	30	116	15,981
General and administrative expenses	637	822	264	232	841	4,483	22	806	8,107
Services (to) / from CC and other BDs	2,289	1,209	1,077	502	2,817	(8,215)	(57)	379	0
<i>of which: services from CC – Services</i>	<i>2,209</i>	<i>1,193</i>	<i>1,180</i>	<i>523</i>	<i>2,731</i>	<i>(8,245)</i>	<i>96</i>	<i>313</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	5	3	17	2	26	868	0	0	920
Amortization and impairment of intangible assets <sup>2</sup>	3	51	0	8	24	21	0	0	107
Total operating expenses <sup>3</sup>	5,465	6,663	2,231	1,474	6,929	1,059	(5)	1,301	25,116
<b>Operating profit / (loss) before tax</b>	<b>2,689</b>	<b>718</b>	<b>1,646</b>	<b>584</b>	<b>1,892</b>	<b>(818)</b>	<b>282</b>	<b>(1,503)</b>	<b>5,489</b>
Tax expense / (benefit)									(898)
<b>Net profit / (loss)</b>									<b>6,386</b>
<b>Additional Information</b>									
Total assets	119,850	60,993	141,164	12,874	253,486	22,566	237,517	94,369	942,819
Additions to non-current assets	6	4	14	1	18	1,851	0	1	1,895

<sup>1</sup> Impairments of financial assets available for sale for the year ended 31 December 2015 totaled CHF 1 million, all in Wealth Management. <sup>2</sup> Refer to Note 15 for more information. <sup>3</sup> Refer to Note 30 for information on restructuring expenses.

## Note 2b Segment reporting by geographic location

The operating regions shown in the table below correspond to the regional management structure of the Group. The allocation of operating income to these regions reflects, and is consistent with, the basis on which the business is managed and its performance is evaluated. These allocations involve assumptions and judgments that management considers to be reasonable, and may be refined to reflect changes in estimates or management structure. The main principles of the allocation methodology are that client revenues are attributed to the

domicile of the client and trading and portfolio management revenues are attributed to the country where the risk is managed. This revenue attribution is consistent with the mandate of the regional Presidents. Certain revenues, such as those related to Corporate Center – Non-core and Legacy Portfolio, are managed at a Group level. These revenues are included in the *Global* line.

The geographic analysis of non-current assets is based on the location of the entity in which the assets are recorded.

### For the year ended 31 December 2017

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	12.0	41	7.2	44
<i>of which: USA</i>	11.4	39	6.7	41
Asia Pacific	4.7	16	0.8	5
Europe, Middle East and Africa	6.0	21	1.9	12
Switzerland	6.9	24	6.4	40
Global	(0.4)	(1)	0.0	0
<b>Total</b>	<b>29.1</b>	<b>100</b>	<b>16.2</b>	<b>100</b>

### For the year ended 31 December 2016

	Total operating income <sup>1</sup>		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.5	41	7.4	47
<i>of which: USA</i>	11.0	39	7.0	44
Asia Pacific	4.2	15	0.7	4
Europe, Middle East and Africa	6.1	22	1.8	11
Switzerland	6.9	24	6.0	38
Global	(0.5)	(2)	0.0	0
<b>Total</b>	<b>28.3</b>	<b>100</b>	<b>15.9</b>	<b>100</b>

### For the year ended 31 December 2015

	Total operating income <sup>1</sup>		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.2	37	7.1	47
<i>of which: USA</i>	10.5	34	6.7	44
Asia Pacific	5.1	17	0.5	3
Europe, Middle East and Africa	6.8	22	1.7	11
Switzerland	7.2	24	5.9	39
Global	0.4	1	0.0	0
<b>Total</b>	<b>30.6</b>	<b>100</b>	<b>15.2</b>	<b>100</b>

<sup>1</sup> The geographical allocation of Total operating income has been restated to reflect a refinement in the allocation methodology.

# Income statement notes

## Note 3 Net interest and trading income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Net interest and trading income<sup>1</sup></b>			
Net interest income	6,528	6,413	6,732
of which: Wealth Management	2,344	2,331	2,326
of which: Wealth Management Americas	1,679	1,467	1,174
of which: Personal & Corporate Banking	2,086	2,199	2,270
of which: Asset Management	(14)	(24)	(17)
Net trading income	4,972	4,948	5,742
of which: Wealth Management	694	667	708
of which: Wealth Management Americas	332	372	362
of which: Personal & Corporate Banking	376	333	343
of which: Asset Management	(10)	(5)	12
<b>Total net interest and trading income</b>	<b>11,499</b>	<b>11,361</b>	<b>12,474</b>
of which: Investment Bank	4,282	4,277	5,186
of which: Corporate Client Solutions	1,065	822	1,001
of which: Investor Client Services	3,217	3,455	4,185
of which: Corporate Center	(270)	(256)	110
of which: Services	(42)	(89)	(3)
of which: Group ALM	(157)	(104)	426
of which: own credit on financial liabilities designated at fair value			553
of which: Non-core and Legacy Portfolio	(71)	(62)	(313)
<b>Net interest income</b>			
<b>Interest income</b>			
Interest income from loans and deposits <sup>2,3,4</sup>	8,461	9,570	8,625
Interest income from securities financing transactions <sup>5</sup>	1,542	1,136	896
Interest income from trading portfolio <sup>6</sup>	2,565	2,465	3,071
Interest income from financial assets and liabilities designated at fair value	548	361	194
Interest income from financial assets available for sale and held to maturity <sup>6</sup>	260	253	391
Interest income from derivative instruments designated as cash flow hedges <sup>2</sup>	818		
<b>Total</b>	<b>14,193</b>	<b>13,787</b>	<b>13,177</b>
<b>Interest expense</b>			
Interest expense on loans and deposits <sup>7</sup>	1,375	826	476
Interest expense on securities financing transactions <sup>8</sup>	1,444	1,233	976
Interest expense on trading portfolio <sup>9</sup>	1,506	1,614	1,670
Interest expense on financial assets and liabilities designated at fair value	864	841	730
Interest expense on debt issued <sup>2</sup>	2,478	2,858	2,592
<b>Total</b>	<b>7,665</b>	<b>7,373</b>	<b>6,445</b>
<b>Net interest income</b>	<b>6,528</b>	<b>6,413</b>	<b>6,732</b>
<b>Net trading income</b>			
Investment Bank Corporate Client Solutions	597	188	321
Investment Bank Investor Client Services	2,812	3,332	3,494
Other business divisions and Corporate Center	1,562	1,428	1,928
<b>Net trading income</b>	<b>4,972</b>	<b>4,948</b>	<b>5,742</b>
of which: net gains / (losses) from financial assets designated at fair value	2,574	(191)	(127)
of which: net gains / (losses) from financial liabilities designated at fair value <sup>10</sup>	(3,920)	(1,362)	3,701

<sup>1</sup> Net interest and trading income presented for business divisions and Corporate Center units includes allocations from Corporate Center – Group ALM. <sup>2</sup> Effective 1 January 2017, the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships was refined. Refer to Note 1b for more information. <sup>3</sup> Includes interest income on impaired loans and advances of CHF 12 million for 2017, CHF 21 million for 2016 and CHF 16 million for 2015. <sup>4</sup> Consists of interest income from balances with central banks, amounts due from banks and loans, and negative interest on amounts due to banks and customers. <sup>5</sup> Includes interest income on securities borrowed and reverse repurchase agreements and negative interest, including fees, on securities lent and repurchase agreements. <sup>6</sup> Includes dividend income. <sup>7</sup> Consists of interest expense on amounts due to banks and customers, and negative interest on balances with central banks, amounts due from banks and loans. <sup>8</sup> Includes interest expense on securities lent and repurchase agreements and negative interest, including fees, on securities borrowed and reverse repurchase agreements. <sup>9</sup> Includes expense related to dividend payment obligations on trading liabilities. <sup>10</sup> Excludes fair value changes of hedges related to financial liabilities designated at fair value and foreign currency translation effects arising from translating foreign currency transactions into the respective functional currency, both of which are reported within Net trading income.

#### Note 4 Net fee and commission income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Underwriting fees	1,295	946	1,246
<i>of which: equity underwriting fees</i>	837	516	836
<i>of which: debt underwriting fees</i>	458	431	410
M&A and corporate finance fees	683	733	737
Brokerage fees	3,440	3,541	3,930
Investment fund fees	3,219	3,155	3,567
Portfolio management and advisory fees	8,542	8,035	7,858
Other	1,812	1,747	1,678
<b>Total fee and commission income</b>	<b>18,991</b>	<b>18,157</b>	<b>19,016</b>
Brokerage fees paid	660	757	869
Other	1,144	1,003	1,007
<b>Total fee and commission expense</b>	<b>1,804</b>	<b>1,760</b>	<b>1,876</b>
<b>Net fee and commission income</b>	<b>17,186</b>	<b>16,397</b>	<b>17,140</b>
<i>of which: net brokerage fees</i>	2,779	2,784	3,060

#### Note 5 Other income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Associates, joint ventures and subsidiaries</b>			
Net gains / (losses) from disposals of subsidiaries <sup>1</sup>	37 <sup>2</sup>	(150)	264
Share of net profits of associates and joint ventures	75	106	169
Impairment charges related to associates	(7)		
<b>Total</b>	<b>105</b>	<b>(44)</b>	<b>433</b>
<b>Financial assets available for sale</b>			
Net gains / (losses) from disposals	193	346	252
Impairment charges	(15)	(5)	(1)
<b>Total</b>	<b>178</b>	<b>342</b>	<b>251</b>
Net income from properties (excluding net gains / (losses) from disposals) <sup>3</sup>	24	25	28
Net gains / (losses) from disposals of properties held for sale	0	125	378
Net gains / (losses) from disposals of loans and receivables	15	(3)	26
Other	189 <sup>2</sup>	154	(9)
<b>Total other income</b>	<b>509</b>	<b>599</b>	<b>1,107</b>

<sup>1</sup> Includes foreign exchange gains / (losses) reclassified from Other comprehensive income related to disposed foreign subsidiaries and branches. <sup>2</sup> Net gains / (losses) from disposals of subsidiaries and Other include a net gain on sale of subsidiaries and businesses of CHF 153 million in Asset Management. Refer to Note 30 for more information. <sup>3</sup> Includes net rent received from third parties and net operating expenses.



## Note 6 Personnel expenses

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Salaries <sup>1</sup>	6,037	6,230	6,282
Variable compensation – performance awards <sup>2</sup>	3,090	2,972	3,210
<i>of which: guarantees for new hires</i>	36	30	38
Variable compensation – other <sup>2</sup>	248	418	346
<i>of which: replacement payments<sup>3</sup></i>	71	86	76
<i>of which: forfeiture credits</i>	(105)	(73)	(86)
<i>of which: severance payments<sup>4</sup></i>	111	217	157
<i>of which: retention plan and other payments<sup>5</sup></i>	171	188	198
Wealth Management Americas: Financial advisor compensation <sup>2,6</sup>	3,986	3,697	3,552
Contractors	451	420	365
Social security	798	747	820
Pension and other post-employment benefit plans <sup>7</sup>	710	670	808
Other personnel expenses	570	565	600
<b>Total personnel expenses<sup>8</sup></b>	<b>15,889</b>	<b>15,720</b>	<b>15,981</b>

<sup>1</sup> Includes role-based allowances. <sup>2</sup> Refer to Note 27 for more information. <sup>3</sup> Replacement payments are payments made to compensate employees for deferred awards forfeited as a result of joining UBS. <sup>4</sup> Includes legally obligated and standard severance payments. <sup>5</sup> Includes interest expense related to Deferred Contingent Capital Plan awards. <sup>6</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. <sup>7</sup> Refer to Note 26 for more information. <sup>8</sup> Includes net restructuring expenses of CHF 534 million, CHF 751 million and CHF 460 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 30 for more information.

## Note 7 General and administrative expenses

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Occupancy	890	935	930
Rent and maintenance of IT and other equipment	560	511	510
Communication and market data services	610	626	611
Administration <sup>1</sup>	600	713	718
Marketing and public relations	411	467	486
Travel and entertainment	416	423	460
Professional fees	1,202	1,234	1,354
Outsourcing of IT and other services	1,566	1,637	1,743
Provisions for litigation, regulatory and similar matters <sup>2</sup>	420	795	1,087
Other	132	93	208
<b>Total general and administrative expenses<sup>3</sup></b>	<b>6,808</b>	<b>7,434</b>	<b>8,107</b>

<sup>1</sup> Administration costs include net expenses related to the UK bank levy of CHF 17 million, CHF 123 million and CHF 166 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. 2017 included a CHF 82 million credit related to prior years. <sup>2</sup> Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 20 for more information. Also includes recoveries from third parties of CHF 53 million, CHF 13 million and CHF 10 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. <sup>3</sup> Includes net restructuring expenses of CHF 627 million, CHF 695 million and CHF 761 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 30 for more information.

## Note 8 Income taxes

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Tax expense / (benefit)</b>			
<b>Swiss</b>			
Current	448	459	239
Deferred	37	635	330
<b>Non-Swiss</b>			
Current	427	353	476
Deferred	3,227	(642)	(1,943)
<b>Total income tax expense / (benefit) recognized in the income statement</b>	<b>4,139</b>	<b>805</b>	<b>(898)</b>

### Income tax recognized in the income statement

An income tax expense of CHF 4,139 million was recognized for the Group in 2017, which included a net Swiss tax expense of CHF 485 million and a net non-Swiss tax expense of CHF 3,654 million.

The Swiss tax expense included a current tax expense of CHF 448 million related to taxable profits earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 37 million, which reflected a net decrease in deferred tax assets (DTAs) previously recognized in relation to tax losses carried forward and temporary differences.

The non-Swiss tax expense included a current tax expense of CHF 427 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 3,227 million, which reflected a net decrease in DTAs previously recognized in relation to tax losses carried forward and temporary differences and mainly related to the write-down of US DTAs resulting from the reduction in the federal corporate tax rate to 21% from 35% after the enactment of the Tax Cuts and Jobs Act (TCJA) during the fourth quarter of 2017.

UBS considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its DTAs, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing DTAs. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Operating profit / (loss) before tax	5,268	4,090	5,489
of which: Swiss	2,057	2,629	3,753
of which: non-Swiss	3,211	1,461	1,736
Income taxes at Swiss tax rate of 21%	1,106	859	1,153
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	211	74	(73)
Tax effects of losses not recognized	168	185	107
Previously unrecognized tax losses now utilized	(358)	(39)	(107)
Non-taxable and lower taxed income	(301)	(353)	(297)
Non-deductible expenses and additional taxable income	591	950	541
Adjustments related to prior years – current tax	(13)	22	29
Adjustments related to prior years – deferred tax	4	2	(48)
Change in deferred tax valuation allowances	(161)	(986)	(2,419)
Adjustments to deferred tax balances arising from changes in tax rates	2,824	19	190
Other items	67	72	27
<b>Income tax expense / (benefit)</b>	<b>4,139</b>	<b>805</b>	<b>(898)</b>

## Note 8 Income taxes (continued)

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The tax expense of CHF 4,139 million for 2017 was higher than the tax expense of CHF 805 million in 2016, mainly as 2017 included a net write-down of DTAs of CHF 2,865 million resulting from the aforementioned reduction in the US federal corporate tax rate.

The components of operating profit before tax, and the differences between income tax expense reflected in the financial statements and the amounts calculated at the Swiss tax rate, are provided in the table on the previous page and explained below.

### Non-Swiss tax rates differing from Swiss tax rate

To the extent that Group profits or losses arise outside Switzerland, the applicable local tax rate may differ from the Swiss tax rate. This item reflects, for such profits or losses, an adjustment from the tax expense / benefit that would arise at the Swiss tax rate and the tax expense / benefit that would arise at the applicable local tax rate. If an entity generates a profit, a tax expense arises where the local tax rate is in excess of the Swiss tax rate and a tax benefit arises where the local tax rate is below the Swiss tax rate. Conversely, if an entity incurs a loss, a tax benefit arises where the local tax rate is in excess of the Swiss tax rate and a tax expense arises where the local tax rate is less than the Swiss tax rate.

### Tax effects of losses not recognized

This item relates to tax losses of entities arising in the year, which are not recognized as DTAs. Consequently, no tax benefit arises in relation to those losses. Therefore, the tax benefit calculated by applying the local tax rate to those losses as described above is reversed.

### Previously unrecognized tax losses now utilized

This item relates to taxable profits of the year, which are offset by tax losses of previous years, for which no DTAs were previously recorded. Consequently, no current tax or deferred tax expense arises in relation to those taxable profits. Therefore, the tax expense calculated by applying the local rate on those profits is reversed.

### Non-taxable and lower taxed income

This item relates to profits for the year, which are either permanently not taxable or are taxable, but at a lower rate of tax than the local tax rate. It also includes any permanent deductions made for tax purposes, which are not reflected in the accounts.

### Non-deductible expenses and additional taxable income

This item mainly relates to income for the year, which is imputed for tax purposes for an entity, but is not included in its operating profit. In addition, it includes expenses for the year that are permanently non-deductible.

### Adjustments related to prior years – current tax

This item relates to adjustments to current tax expense for prior years, for example, if the tax payable for a year agreed with the tax authorities is expected to differ from the amount previously reflected in the financial statements.

### Adjustments related to prior years – deferred tax

This item relates to adjustments to deferred tax positions recognized in prior years, for example, if a tax loss for a year is fully recognized and the amount of the tax loss agreed with the tax authorities is expected to differ from the amount previously recognized as DTAs in the accounts.

## Note 8 Income taxes (continued)

### Change in deferred tax valuation allowances

This item includes revaluations of DTAs previously recognized resulting from reassessments of expected future taxable profits. It also includes changes in temporary differences in the year, for which deferred tax is not recognized. The amount in the year mainly relates to the upward revaluation of DTAs.

### Adjustments to deferred tax balances arising from changes in tax rates

This item relates to remeasurements of DTAs and liabilities recognized due to changes in tax rates. These have the effect of changing the future tax saving that is expected from tax losses or deductible tax differences and therefore the amount of DTAs recognized or, alternatively, changing the tax cost of additional taxable income from taxable temporary differences and therefore the deferred tax liability. This item primarily relates to the net write-down of DTAs following a reduction in the US federal corporate tax rate to 21% from 35% after the enactment of the TCJA during the fourth quarter of 2017.

### Other items

Other items include other differences between profits or losses at the local tax rate and the actual local tax expense or benefit, including increases in provisions for uncertain positions in relation to the current year and other items.

### Income tax recognized directly in equity

Certain tax expenses and benefits were recognized directly in equity, which included the following items:

- a net tax benefit of CHF 359 million recognized in other comprehensive income (OCI), which included a tax benefit of CHF 160 million related to cash flow hedges (2016: benefit of CHF 170 million), a tax expense of CHF 7 million related to financial assets classified as available for sale (2016: benefit of CHF 28 million), a tax benefit of CHF 196 million related to foreign currency translation gains and losses (2016: expense of CHF 84 million), a tax benefit of CHF 11 million related to defined benefit plans (2016: benefit of CHF 52 million) and a tax expense of CHF 1 million (2016: benefit of CHF 5 million) related to own credit
- a tax benefit of CHF 21 million recognized in share premium (2016: benefit of CHF 28 million)
- the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than Swiss francs, which are included in foreign currency translation movements in OCI.

### Deferred tax assets and liabilities

The Group has DTAs related to tax loss carry-forwards and other items as shown in the table below. As of 31 December 2017, DTAs of CHF 1,231 million (31 December 2016: CHF 1,689 million) were recognized by entities that incurred losses in either the current or preceding year based on projections of future taxable profits. The valuation allowance reflects DTAs that were not recognized because it was not considered probable that future taxable profits will be available to utilize the related tax loss carry-forwards and deductible temporary differences.

CHF million	31.12.17			31.12.16		
	Gross	Valuation allowance	Recognized	Gross	Valuation allowance	Recognized
<b>Deferred tax assets<sup>1</sup></b>						
Tax loss carry-forwards	16,934	(11,191)	5,743	24,627	(16,430)	8,197
Temporary differences	5,077	(975)	4,102	6,346	(1,388)	4,958
<i>of which: related to compensation and benefits</i>	1,136	(222)	914	1,420	(208)	1,211
<i>of which: related to trading assets</i>	473	(58)	414	935	(118)	817
<i>of which: related to investments in subsidiaries and goodwill</i>	2,374	0	2,374	2,059	0	2,059
<i>of which: other</i>	1,095	(695)	400	1,932	(1,062)	870
<b>Total deferred tax assets</b>	<b>22,011</b>	<b>(12,166)</b>	<b>9,844</b>	<b>30,973</b>	<b>(17,818)</b>	<b>13,155</b>
<b>Deferred tax liabilities</b>						
Goodwill and intangible assets			18			24
Other			34			20
<b>Total deferred tax liabilities</b>			<b>53</b>			<b>44</b>

<sup>1</sup> Less deferred tax liabilities as applicable.

## Note 8 Income taxes (continued)

As of 31 December 2017, tax loss carry-forwards totaling CHF 46,232 million (31 December 2016: CHF 49,478 million), which are not recognized as DTAs, were available to be offset against future taxable profits. These tax losses expire as outlined in the table below.

### Unrecognized tax loss carry-forwards

<i>CHF million</i>	31.12.17	31.12.16
Within 1 year	167	0
From 2 to 5 years	103	66
From 6 to 10 years	3,185	910
From 11 to 20 years	26,015	32,603
No expiry	16,762	15,899
<b>Total</b>	<b>46,232</b>	<b>49,478</b>

In general, Swiss tax losses can be carried forward for seven years, US federal tax losses incurred before 31 December 2017 for 20 years and US federal tax losses incurred after 31 December 2017 and also UK and Jersey tax losses for an unlimited period.

The Group recognizes deferred tax liabilities on undistributed earnings of subsidiaries, except to the extent that those earnings are indefinitely invested. As of 31 December 2017, no such earnings were considered indefinitely invested.

The Financial Statements have been prepared on the basis that UBS Limited is able to offset part of its taxable profits against losses transferred from UBS AG. During 2016, the UK tax authorities indicated that they do not agree with this tax return filing position, but the authorities have now advised UBS that they accept that a transfer can occur and have also accepted UBS's proposed methods to calculate the amount of losses to be transferred as adopted on the tax return filing position.

## Note 9 Earnings per share (EPS) and shares outstanding

	As of or for the year ended		
	31.12.17	31.12.16	31.12.15
<b>Basic earnings (CHF million)</b>			
Net profit / (loss) attributable to shareholders	1,053	3,204	6,203
<b>Diluted earnings (CHF million)</b>			
Net profit / (loss) attributable to shareholders	1,053	3,204	6,203
Less: (profit) / loss on own equity derivative contracts	0	0	0
Net profit / (loss) attributable to shareholders for diluted EPS	1,053	3,204	6,203
<b>Weighted average shares outstanding</b>			
Weighted average shares outstanding for basic EPS	3,716,174,261	3,719,764,322	3,690,375,879
Effect of dilutive potential shares resulting from notional shares, in-the-money options and warrants outstanding	120,540,272	104,244,665	90,898,386
Weighted average shares outstanding for diluted EPS	3,836,714,533	3,824,008,987	3,781,274,265
<b>Earnings per share (CHF)</b>			
Basic	0.28	0.86	1.68
Diluted	0.27	0.84	1.64
<b>Shares outstanding</b>			
Shares issued	3,853,096,603	3,850,766,389	3,849,731,535
Treasury shares	132,301,550	138,441,772	98,706,275
Shares outstanding	3,720,795,053	3,712,324,617	3,751,025,260

The table below outlines the potential shares which could dilute basic earnings per share in the future, but were not dilutive for the periods presented.

	31.12.17	31.12.16	31.12.15
<i>Number of shares</i>			
<b>Potentially dilutive instruments</b>			
Employee share-based compensation awards	24,124,341	46,981,698	67,766,835
Other equity derivative contracts	9,122,496	8,419,122	6,061,848
<b>Total</b>	<b>33,246,837</b>	<b>55,400,820</b>	<b>73,828,683</b>

## Balance sheet notes: assets

### Note 10 Due from banks and loans (held at amortized cost)

CHF million	31.12.17	31.12.16
<b>By type of exposure</b>		
Due from banks, gross	13,741	13,159
Allowance for credit losses	(3)	(3)
Due from banks, net	13,739	13,156
Loans, gross		
Residential mortgages	144,431	142,197
Commercial mortgages	18,717	19,765
Lombard loans	115,059	104,999
Other loans <sup>1</sup>	38,837	36,481
Finance lease receivables <sup>2</sup>	1,069	986
Securities	2,113	2,494
Subtotal	320,225	306,921
Allowance for credit losses	(658)	(596)
Loans, net	319,568	306,325
<b>Total due from banks and loans, net<sup>3</sup></b>	<b>333,306</b>	<b>319,481</b>

<sup>1</sup> Includes corporate loans. <sup>2</sup> Refer to Note 31 for more information. <sup>3</sup> Refer to Note 25b for more information on collateral and credit enhancements.

### Note 11 Allowances and provisions for credit losses

CHF million	Specific allowances	Collective allowances	Total allowances – due from banks and loans	Allowances – other assets	Provisions <sup>1</sup>	Total 31.12.17	Total 31.12.16
<b>By movement</b>							
Balance at the beginning of the year	587	12	599	0	54	653	727
Write-offs / usage of provisions	(115)	(2)	(117)	0	0	(117)	(145)
Recoveries	19	1	19	0	0	20	22
Increase / (decrease) recognized in the income statement	145	3	148	0	(21)	128	37
Foreign currency translation	(7)	0	(7)	0	0	(7)	0
Other	19	0	19	18	0	37	12
<b>Balance at the end of the year</b>	<b>648</b>	<b>13</b>	<b>661</b>	<b>19</b>	<b>33</b>	<b>713</b>	<b>653</b>

<sup>1</sup> Represents provisions for loan commitments and guarantees. Refer to Note 20 for more information. Refer to the "Treasury management" section of this report for the maximum irrevocable amount of loan commitments and guarantees.

CHF million	Specific allowances	Collective allowances	Total allowances	Allowances – other assets	Provisions <sup>1</sup>	Total 31.12.17	Total 31.12.16
<b>By balance sheet line</b>							
Due from banks	3	0	3			3	3
Loans	645	13	658			658	596
Other assets				19		19	0
Provisions					33	33	54
<b>Balance at the end of the year</b>	<b>648</b>	<b>13</b>	<b>661</b>	<b>19</b>	<b>33</b>	<b>713</b>	<b>653</b>

<sup>1</sup> Represents provisions for loan commitments and guarantees.

## Note 12 Derivative instruments and hedge accounting

### Derivatives: overview

A derivative is a financial instrument for which the value is derived from one or more variables (underlyings). Underlyings may be indices, foreign currency exchange or interest rates, or the value of shares, commodities, bonds or other financial instruments. A derivative commonly requires little or no initial net investment by either counterparty to the trade.

The majority of derivative contracts are negotiated with respect to notional amounts, tenor, price and settlement mechanisms, as is customary with other financial instruments.

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement between UBS and its counterparties. Terms are negotiated directly with counterparties and the contracts have industry-standard settlement mechanisms prescribed by ISDA. Recent rules, introduced by regulators in various jurisdictions, require or will soon require the payment and collection of initial and variation margin on certain OTC derivative contracts, which may have a bearing on their price and other relevant terms.

The industry continues to promote the use of central counterparties (CCPs) to clear OTC trades. The trend toward CCP clearing and settlement will generally facilitate the reduction of systemic credit exposures.

Other derivative contracts are standardized in terms of their amounts and settlement dates, and are bought and sold on regulated exchanges. These are commonly referred to as exchange-traded derivatives (ETD) contracts. Exchanges offer the benefits of pricing transparency, standardized daily settlement of changes in value and consequently reduced credit risk.

For presentation purposes, the Group's derivative contracts are subject to IFRS netting provisions. Derivative instruments are measured at fair value and generally classified as *Positive replacement values* and *Negative replacement values* on the balance sheet. However, ETD that are economically settled on a daily basis and OTC derivatives that are either legally settled or in substance net settled on a daily basis are classified as *Cash collateral receivables on derivative instruments* or *Cash collateral payables on derivative instruments*. Changes in the replacement values of derivatives are recorded in *Net trading income*, except for interest on derivatives designated as hedging instruments in effective hedge accounting relationships and forward points on certain short duration foreign exchange contracts that are recorded in *Net interest income*.

→ Refer to Note 1a items 3j and 3k for more information

→ Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements

The Group uses various derivative instruments for both trading and hedging purposes. Derivative product types as well as valuation principles and techniques applied by the Group are described in Note 22. *Positive replacement values* represent the estimated amount the Group would receive if the derivative contract were sold on the balance sheet date. *Negative replacement values* indicate the estimated amount the Group would pay to transfer its obligations in respect of the underlying contract were it required or entitled to do so on the balance sheet date.

Derivatives embedded in other financial instruments are not included in the "Derivative instruments" table within this Note. Bifurcated embedded derivatives are presented on the same balance sheet line as the host contract. In cases where UBS applies the fair value option to hybrid instruments, bifurcation of an embedded derivative component is not required and as such this component is also not included in the "Derivative instruments" table.

→ Refer to Notes 18 and 22 for more information

### Risks of derivative instruments

Derivative instruments are transacted in many trading portfolios, which generally include several types of instruments, not just derivatives. The market risk of derivatives is predominantly managed and controlled as an integral part of the market risk of these portfolios. The Group's approach to market risk is described in the audited portions of "Market risk" in the "Risk management and control" section of this report.

Derivative instruments are also transacted with many different counterparties, most of whom are also counterparties for other types of business. The credit risk of derivatives is managed and controlled in the context of the Group's overall credit exposure to its counterparties. The Group's approach to credit risk is described in the audited portions of "Credit risk" in the "Risk management and control" section of this report. It should be noted that, although the positive replacement values shown on the balance sheet can be an important component of the Group's credit exposure, the positive replacement values related to a respective counterparty are rarely an adequate reflection of the Group's credit exposure in its derivatives business with that counterparty. This is generally the case because, on the one hand, replacement values can increase over time (potential future exposure), while on the other hand, exposure may be mitigated by entering into master netting agreements and bilateral collateral arrangements. Both the exposure measures used internally by the Group to control credit risk and the capital requirements imposed by regulators reflect these additional factors.

→ Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements



## Note 12 Derivative instruments and hedge accounting (continued)

### Derivative instruments<sup>1</sup>

CHF billion	31.12.17					31.12.16				
	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>
<b>Interest rate contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts <sup>6</sup>	0.1	22.1	0.3	8.2	2,321.1	0.1	29.6	0.1	21.9	2,242.8
Swaps	35.4	539.2	28.2	453.7	7,530.2	45.2	599.3	38.3	552.6	7,064.2
Options	8.5	558.1	9.8	547.2		12.6	478.1	13.9	480.6	
Exchange-traded contracts										
Futures					455.6					326.4
Options	0.0	22.7	0.0	34.4	155.4	0.0	45.4	0.0	4.5	96.2
Agency transactions <sup>7</sup>	0.0		0.0			0.2		0.2		
<b>Total</b>	<b>44.0</b>	<b>1,142.1</b>	<b>38.4</b>	<b>1,043.6</b>	<b>10,462.2</b>	<b>58.0</b>	<b>1,152.4</b>	<b>52.5</b>	<b>1,059.6</b>	<b>9,729.6</b>
<b>Credit derivative contracts</b>										
Over-the-counter (OTC) contracts										
Credit default swaps	2.7	85.2	3.0	94.4	1.2	3.7	116.9	3.9	135.2	
Total return swaps	0.2	2.2	0.8	3.9		0.2	3.3	0.9	4.3	
Options and warrants	0.0	4.3	0.0	0.1		0.0	2.9	0.0	0.1	
<b>Total</b>	<b>2.8</b>	<b>91.8</b>	<b>3.8</b>	<b>98.3</b>	<b>1.2</b>	<b>3.9</b>	<b>123.1</b>	<b>4.8</b>	<b>139.6</b>	
<b>Foreign exchange contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts	17.2	681.4	17.8	691.6		21.8	715.6	19.0	650.9	
Interest and currency swaps	23.8	1,275.5	21.8	1,098.4		43.2	1,220.8	42.0	1,115.0	
Options	6.1	427.0	5.8	397.6		11.1	530.3	11.0	513.7	
Exchange-traded contracts										
Futures					0.4					6.1
Options	0.0	4.7	0.1	5.6		0.0	2.9	0.1	6.0	
Agency transactions <sup>7</sup>	0.0		0.0			0.0		0.0		
<b>Total</b>	<b>47.1</b>	<b>2,388.5</b>	<b>45.5</b>	<b>2,193.3</b>	<b>0.4</b>	<b>76.1</b>	<b>2,469.6</b>	<b>72.1</b>	<b>2,285.6</b>	<b>6.1</b>
<b>Equity / index contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Swaps	3.4	71.2	5.5	100.4		3.6	76.5	4.8	69.0	
Options	5.8	76.6	8.2	125.0		3.7	49.6	5.8	92.8	
Exchange-traded contracts										
Futures					51.9					33.0
Options	6.9	232.6	6.9	261.2	31.0	3.8	142.5	4.6	155.8	21.6
Agency transactions <sup>7</sup>	6.2		6.1			6.9		6.9		
<b>Total</b>	<b>22.2</b>	<b>380.3</b>	<b>26.7</b>	<b>486.6</b>	<b>82.9</b>	<b>18.0</b>	<b>268.6</b>	<b>22.1</b>	<b>317.6</b>	<b>54.5</b>

Table continues on the next page.

## Note 12 Derivative instruments and hedge accounting (continued)

### Derivative instruments<sup>1</sup> (continued)

Table continued from the previous page.

#### Derivative instruments (continued)<sup>1</sup>

CHF billion	31.12.17					31.12.16				
	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>
<b>Commodity contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts	0.1	2.9	0.1	3.8		0.3	4.8	0.1	2.7	
Swaps	0.2	8.5	0.4	12.8		0.4	10.9	0.5	13.4	
Options	0.3	11.3	0.1	7.9		0.5	14.1	0.2	9.9	
Exchange-traded contracts										
Futures					8.2					9.1
Forward contracts	0.2	9.4	0.0	7.9		0.1	5.9	0.0	4.6	
Options	0.0	1.0	0.1	4.4	0.3	0.0	3.2	0.1	5.3	0.0
Agency transactions <sup>7</sup>	0.9		0.9			0.9		0.9		
<b>Total</b>	<b>1.7</b>	<b>33.1</b>	<b>1.6</b>	<b>36.9</b>	<b>8.4</b>	<b>2.3</b>	<b>39.0</b>	<b>2.0</b>	<b>35.9</b>	<b>9.1</b>
Unsettled purchases of non-derivative financial instruments <sup>8</sup>	0.1	12.0	0.1	10.9		0.1	18.4	0.1	9.7	
Unsettled sales of non-derivative financial instruments <sup>8</sup>	0.1	14.8	0.1	8.7		0.1	13.0	0.2	11.5	
<b>Total derivative instruments, based on IFRS netting<sup>9</sup></b>	<b>118.2</b>	<b>4,062.6</b>	<b>116.1</b>	<b>3,878.3</b>	<b>10,555.0</b>	<b>158.4</b>	<b>4,084.0</b>	<b>153.8</b>	<b>3,859.6</b>	<b>9,799.3</b>

<sup>1</sup> Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The replacement values and related notional values of these derivatives were not material for the periods presented. <sup>2</sup> PRV: positive replacement value. <sup>3</sup> In cases where replacement values are presented on a net basis on the balance sheet, the respective notional values of the netted replacement values are still presented on a gross basis. <sup>4</sup> NRV: negative replacement value. <sup>5</sup> Other notional values relate to derivatives that are cleared through either a central clearing counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments and was not material for the periods presented. <sup>6</sup> Negative replacement values as of 31 December 2017 include CHF 0.0 billion related to derivative loan commitments (31 December 2016: CHF 0.1 billion). No notional amounts related to these replacement values are included in the table. The maximum irrevocable amount related to these commitments was CHF 5.3 billion as of 31 December 2017 (31 December 2016: CHF 14.3 billion). <sup>7</sup> Notional values of exchange-traded agency transactions and OTC-cleared transactions entered into on behalf of clients are not disclosed due to their significantly different risk profile. <sup>8</sup> Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as replacement values. <sup>9</sup> Refer to Note 24 for more information on netting arrangements.

The notional amount of a derivative is generally the quantity of the underlying instrument on which the derivative contract is based and is the reference against which changes in the value of the derivative are measured. Notional values in themselves are generally not a direct indication of the values that are exchanged between parties, and are therefore not a direct measure of risk or financial exposure but are viewed as an indication of the scale of the different types of derivatives entered into by the Group.

On a notional value basis, approximately 54% of OTC interest rate contracts held as of 31 December 2017 (31 December 2016: 52%) mature within one year, 28% (31 December 2016: 29%) within one to five years and 18% (31 December 2016: 19%) after five years. Notional values of interest rate contracts cleared with a clearing house that qualify for IFRS balance sheet netting or are legally settled on a daily basis are presented under *Other notional values* and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts.

### Derivatives transacted for trading purposes

Most of the Group's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making to directly support the facilitation and execution of client activity. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume.

### Credit derivatives

UBS is an active dealer in the fixed income market, including credit default swaps (CDS) and related products, with respect to a large number of issuers' securities. The primary objectives of these activities are market-making, primarily on behalf of clients, and ongoing hedging of trading book exposures.

## Note 12 Derivative instruments and hedge accounting (continued)

Market-making activity, which is undertaken within the Investment Bank, consists of buying and selling single-name CDS, index CDS, loan CDS and related referenced cash instruments to facilitate client trading activity. UBS also actively utilizes CDS to economically hedge specific counterparty credit risks in its accrual and traded loan portfolios (including off-balance sheet loan commitments) with the aim of reducing concentrations in individual names, sectors or specific portfolios.

In addition, UBS actively utilizes CDS to economically hedge specific counterparty credit risks in its OTC derivative portfolios, including financial instruments that are designated at fair value through profit or loss.

The tables below provide more information on credit protection bought and sold, including replacement and notional value information by instrument type and counterparty type. The value of protection bought and sold is not, in isolation, a measure of UBS's credit risk. Counterparty relationships are viewed in terms of the total outstanding credit risk, which relates to other instruments in addition to CDS, and in connection with collateral arrangements in place. On a notional value basis, approximately 23% of credit protection bought and sold as of 31 December 2017 matures within one year (31 December 2016: 29%), approximately 65% within one to five years (31 December 2016: 61%) and approximately 12% after five years (31 December 2016: 10%).

### Credit derivatives by type of instrument

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Single-name credit default swaps	0.6	1.1	61.3	1.1	0.6	55.7
Multi-name index-linked credit default swaps	0.2	0.9	31.8	0.9	0.2	31.9
Multi-name other credit default swaps	0.0	0.0	0.1	0.0	0.0	0.0
Total rate of return swaps	0.0	0.8	4.4	0.1	0.0	1.7
Options and warrants	0.0	0.0	4.3	0.0	0.0	0.1
<b>Total 31 December 2017</b>	<b>0.8</b>	<b>2.9</b>	<b>101.9</b>	<b>2.0</b>	<b>0.9</b>	<b>89.4</b>
<i>of which: credit derivatives related to economic hedges</i>	<i>0.7</i>	<i>2.4</i>	<i>81.5</i>	<i>1.6</i>	<i>0.8</i>	<i>70.5</i>
<i>of which: credit derivatives related to market-making</i>	<i>0.0</i>	<i>0.5</i>	<i>20.3</i>	<i>0.5</i>	<i>0.0</i>	<i>18.9</i>

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Single-name credit default swaps	1.6	1.3	91.4	1.3	1.4	81.3
Multi-name index-linked credit default swaps	0.2	0.8	38.4	0.5	0.4	38.3
Multi-name other credit default swaps	0.0	0.0	1.5	0.0	0.0	1.1
Total rate of return swaps	0.1	0.7	5.5	0.0	0.2	2.1
Options and warrants	0.0	0.0	2.9	0.0	0.0	0.1
<b>Total 31 December 2016</b>	<b>2.0</b>	<b>2.8</b>	<b>139.7</b>	<b>1.9</b>	<b>2.0</b>	<b>122.9</b>
<i>of which: credit derivatives related to economic hedges</i>	<i>1.4</i>	<i>2.4</i>	<i>111.7</i>	<i>1.5</i>	<i>1.5</i>	<i>96.2</i>
<i>of which: credit derivatives related to market-making</i>	<i>0.5</i>	<i>0.3</i>	<i>28.0</i>	<i>0.4</i>	<i>0.5</i>	<i>26.7</i>

## Note 12 Derivative instruments and hedge accounting (continued)

### Credit derivatives by counterparty

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.2	0.2	16.2	0.2	0.1	12.3
Banks	0.3	0.7	37.0	0.5	0.4	31.6
Central clearing counterparties	0.1	1.1	41.5	1.0	0.1	40.6
Other	0.3	0.9	7.2	0.3	0.2	4.9
<b>Total 31 December 2017</b>	<b>0.8</b>	<b>2.9</b>	<b>101.9</b>	<b>2.0</b>	<b>0.9</b>	<b>89.4</b>

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.4	0.2	20.9	0.2	0.3	16.1
Banks	0.9	1.0	60.8	0.8	1.0	52.6
Central clearing counterparties	0.3	0.9	47.2	0.8	0.4	47.1
Other	0.4	0.8	10.9	0.2	0.3	7.1
<b>Total 31 December 2016</b>	<b>2.0</b>	<b>2.8</b>	<b>139.7</b>	<b>1.9</b>	<b>2.0</b>	<b>122.9</b>

UBS's CDS trades are documented using industry standard forms of documentation or equivalent terms documented in a bespoke agreement. The agreements that govern CDS generally do not contain recourse provisions that would enable UBS to recover from third parties any amounts paid out by UBS.

The types of credit events that would require UBS to perform under a CDS contract are subject to agreement between the parties at the time of the transaction. However, nearly all transactions are traded with reference to credit events that are applicable under certain market conventions based on the type of reference entity to which the transaction relates. Applicable credit events according to market conventions include bankruptcy, failure to pay, restructuring, obligation acceleration and repudiation / moratorium.

### Contingent collateral features of derivative liabilities

Certain derivative instruments contain contingent collateral or termination features triggered upon a downgrade of the published credit ratings of the Group in the normal course of business. Based on UBS's credit ratings as of 31 December 2017, CHF 0.1 billion, CHF 0.3 billion and CHF 1.2 billion would have been required for contractual obligations related to OTC derivatives in the event of a one-notch, two-notch and three-notch reduction in long-term credit ratings, respectively. In evaluating UBS's liquidity requirements, UBS considers additional collateral or termination payments that would be required in the event of a reduction in UBS's long-term credit ratings, and a corresponding reduction in UBS's short-term ratings.

### Derivatives transacted for hedging purposes

The Group enters into derivative transactions for the purposes of hedging risks inherent in assets, liabilities and forecast transactions. The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and whether the hedge qualifies as such for accounting purposes.

Derivative transactions that qualify and are designated as hedges for accounting purposes are described under the corresponding headings in this Note (fair value hedges, cash flow hedges and hedges of net investments in foreign operations).

The Group has also executed various hedging strategies utilizing derivatives for which hedge accounting has not been applied. These economic hedges include interest rate swaps and other interest rate derivatives (e.g., futures) for day-to-day economic interest rate risk management purposes. In addition, the Group has used equity futures, options and, to a lesser extent, swaps in a variety of equity trading strategies to offset underlying equity and equity volatility exposure. The Group has also entered into CDS that provide economic hedges for credit risk exposures (refer to "Credit derivatives" in this Note). The Group's accounting policies for derivatives designated and accounted for as hedging instruments or economic hedges that do not qualify for hedge accounting are described in Note 1a item 3k, where terms used in the following sections are explained.

## Note 12 Derivative instruments and hedge accounting (continued)

### Fair value hedges: interest rate risk related to debt instruments

The Group's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate debt instruments, such as non-structured fixed-rate bonds, covered bonds and subordinated debt, due to

movements in market interest rates. The fair values of outstanding interest rate derivatives designated as fair value hedges were assets of CHF 47 million and liabilities of CHF 2 million as of 31 December 2017 and assets of CHF 152 million and liabilities of CHF 1 million as of 31 December 2016.

### Fair value hedges of interest rate risk

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Gains / (losses) on hedging instruments	(20)	140	554
Gains / (losses) on hedged items attributable to the hedged risk	1	(144)	(552)
<b>Net gains / (losses) representing ineffective portions of fair value hedges</b>	<b>(19)</b>	<b>(4)</b>	<b>2</b>

### Fair value hedges: portfolio interest rate risk related to loans

The Group also applies fair value hedge accounting to mortgage loan portfolio interest rate risk. The change in fair value of the hedged items is recorded separately from the hedged item and is included within *Other assets* on the balance sheet. The fair

values of outstanding interest rate derivatives designated for these hedges as of 31 December 2017 were liabilities of CHF 32 million (31 December 2016: liabilities of CHF 44 million).

### Fair value hedges of portfolio interest rate risk

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Gains / (losses) on hedging instruments	(11)	(128)	(176)
Gains / (losses) on hedged items attributable to the hedged risk	4	116	147
<b>Net gains / (losses) representing ineffective portions of fair value hedges</b>	<b>(7)</b>	<b>(12)</b>	<b>(29)</b>

### Cash flow hedges of forecast transactions

The Group is exposed to variability in future interest cash flows on non-trading financial assets and liabilities that bear interest at variable rates or are expected to be refinanced or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying the non-trading interest rate risk of the Group, which is hedged with interest rate swaps, the maximum maturity of which is 11 years. The table on the following page shows forecast principal balances on which expected interest cash flows arise as of 31 December 2017. Amounts shown represent, by time bucket, average assets and liabilities subject to forecast cash flows designated as hedged items in cash flow hedge accounting relationships.

As of 31 December 2017, the fair values of outstanding derivatives designated as cash flow hedges of forecast transactions were CHF 30 million assets and CHF 2 million liabilities (31 December 2016: CHF 68 million assets and CHF 5 million liabilities).

Other comprehensive income from cash flow hedges, net of tax was negative CHF 621 million, compared with negative CHF 666 million in 2016 and negative CHF 509 million in 2015. This result included the reclassification of a pre-tax net gain from *Other comprehensive income* to the income statement of CHF 826 million in 2017, compared with a pre-tax net gain of CHF 1,082 million in 2016 and a pre-tax net gain of CHF 1,182 million in 2015, partly offset by a pre-tax net fair value gain associated with the effective portion of derivative instruments designated as cash flow hedges recognized in comprehensive income of CHF 45 million in 2017, compared with a pre-tax net gain of CHF 246 million in 2016 and a pre-tax net gain of CHF 544 million in 2015.

As of 31 December 2017, the cumulative net gains associated with the effective portion of derivative instruments designated as cash flow hedges reported in *Equity* were CHF 351 million (31 December 2016: CHF 972 million).

In 2017, a gain of CHF 8 million was recognized in *Net trading income* due to hedge ineffectiveness, compared with a gain of CHF 11 million in 2016 and a gain of CHF 150 million in 2015.

## Note 12 Derivative instruments and hedge accounting (continued)

### Principal balances subject to cash flow forecasts

CHF billion	Within 1 year	1–3 years	3–5 years	5–10 years	Over 10 years
Assets	52	74	49	49	0
Liabilities	3	4	2	2	0
<b>Net balance</b>	<b>50</b>	<b>70</b>	<b>47</b>	<b>47</b>	<b>0</b>

### Hedges of net investments in foreign operations

The Group applies hedge accounting for certain net investments in foreign operations. As of 31 December 2017, the positive replacement values and negative replacement values of foreign exchange (FX) derivatives (mainly FX swaps) designated as hedging instruments in net investment hedge accounting relationships were CHF 78 million and CHF 130 million, respectively (31 December 2016: positive replacement values of CHF 122 million and negative replacement values of CHF 79 million). As of 31 December 2017, the underlying hedged structural exposures in several currencies amounted to CHF 8.2 billion (31 December 2016: CHF 7.5 billion).

Hedges of structural FX exposures in currencies other than the US dollar may be comprised of two jointly designated derivatives as the foreign currency risk may be hedged against the US dollar first and then converted into Swiss francs, the presentation currency of the Group, as part of a separate FX derivative transaction. The aggregated notional amount of designated hedging derivatives as of 31 December 2017 was CHF 13 billion in total (31 December 2016: CHF 12.5 billion), including CHF 8.1 billion notional values related to US dollar versus Swiss franc swaps and CHF 5.0 billion notional values related to derivatives hedging foreign currencies (other than the US dollar) versus the US dollar. The effective portion of gains and losses of these FX swaps is transferred directly to OCI to

offset foreign currency translation (FCT) gains and losses on the net investments in foreign branches and subsidiaries. As such, these FX swaps hedge the structural FX exposure resulting in the accumulation of FCT on the level of individual foreign branches and subsidiaries and hence on the total FCT OCI of the Group.

UBS designates certain non-derivative foreign currency financial assets and liabilities of foreign branches or subsidiaries as hedging instruments in net investment hedge accounting arrangements. The FX translation difference recorded in FCT OCI of the non-derivative hedging instrument of one foreign entity offsets the structural FX exposure of another foreign entity. Therefore, the aggregated FCT OCI of the Group is unchanged from this hedge designation. As of 31 December 2017, the nominal amount of non-derivative financial assets and liabilities designated as hedging instruments in such net investment hedges was CHF 1.4 billion and CHF 1.4 billion, respectively (31 December 2016: CHF 1.5 billion non-derivative financial assets and CHF 1.5 billion non-derivative financial liabilities).

Ineffectiveness of hedges of net investments in foreign operations was not material in 2017, 2016 and 2015.

### Undiscounted cash flows

The table below provides undiscounted cash flow information for derivative instruments designated in hedge accounting relationships.

### Derivatives designated in hedge accounting relationships (undiscounted cash flows)

CHF billion	On demand	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
<b>Interest rate swaps<sup>1</sup></b>							
<b>FX swaps / forwards</b>							
Cash inflows	0	8	4	0	0	0	12
Cash outflows	0	8	4	0	0	0	12
<b>Net cash flows</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Undiscounted cash inflows and cash outflows of interest rate swaps as of 31 December 2017 were not material as the majority of interest rate swaps designated in hedge accounting relationships are legally settled on a daily basis.

## Note 13 Financial assets available for sale and held to maturity

### a) Financial assets available for sale

CHF million	31.12.17	31.12.16
<b>Financial assets available for sale by issuer type<sup>1</sup></b>		
<b>Debt instruments</b>		
Government and government agencies	7,000	11,650
<i>of which: USA</i>	6,569	7,779
Banks	299	1,845
Corporates and other	821	1,554
<b>Total debt instruments</b>	<b>8,120</b>	<b>15,048</b>
<b>Equity instruments</b>	<b>546</b>	<b>628</b>
<b>Total financial assets available for sale</b>	<b>8,665</b>	<b>15,676</b>
Unrealized gains – before tax	216	309
Unrealized (losses) – before tax	(105)	(117)
<b>Net unrealized gains / (losses) – before tax</b>	<b>111</b>	<b>193</b>
<b>Net unrealized gains / (losses) – after tax</b>	<b>8</b>	<b>96</b>

<sup>1</sup> Refer to Note 22c for more information on product type and fair value hierarchy categorization.

### b) Financial assets held to maturity

CHF million	31.12.17	31.12.16
<b>Financial assets held to maturity by issuer type</b>		
<b>Debt instruments</b>		
Government and government agencies	7,476	7,416
<i>of which: USA</i>	4,833	4,688
<i>of which: Germany</i>	1,682	1,708
<i>of which: France</i>	669	867
Banks	1,689	1,873
<b>Total financial assets held to maturity</b>	<b>9,166</b>	<b>9,289</b>

## Note 14 Property, equipment and software

### At historical cost less accumulated depreciation

CHF million	Own-used properties	Leasehold improvements	IT hardware and communication	Internally generated software	Purchased software	Other machines and equipment	Projects in progress	31.12.17	31.12.16
<b>Historical cost</b>									
Balance at the beginning of the year	7,732	3,469	1,521	3,037	408	866	1,125	18,159	17,847
Additions	48	21	118	1	49	14	1,353	1,604	1,788
Disposals / write-offs <sup>1</sup>	(39)	(295)	(115)	(87)	(32)	(53)	0	(622)	(1,104)
Reclassifications	(15)	136	45	1,220	(5)	27	(1,455)	(46) <sup>6</sup>	(200)
Foreign currency translation	(2)	(41)	4	(12)	1	(14)	0	(65)	(172)
Balance at the end of the year	7,723	3,291	1,574	4,159	421	840	1,023	19,030	18,159
<b>Accumulated depreciation</b>									
Balance at the beginning of the year	4,300	2,132	1,027	1,542	233	594	0	9,828	10,153
Depreciation	167	199	179	347	61	61	0	1,015	959
Impairment <sup>2</sup>	(2)	8	4	7	1	1	0	18	26
Disposals / write-offs <sup>1</sup>	(39)	(292)	(112)	(86)	(32)	(52)	0	(614)	(1,090)
Reclassifications	(9)	5	(1)	0	0	0	0	(5) <sup>6</sup>	(146)
Foreign currency translation	(2)	(35)	6	(3)	3	(9)	0	(40)	(75)
Balance at the end of the year	4,414	2,017	1,103	1,807	266	595	0	10,201	9,828
<b>Net book value</b>									
Net book value at the beginning of the year	3,432	1,337	495	1,495	175	272	1,125	8,331	7,695
<b>Net book value at the end of the year<sup>3,4</sup></b>	<b>3,309</b>	<b>1,274</b>	<b>471</b>	<b>2,352</b>	<b>155</b>	<b>245</b>	<b>1,023<sup>5</sup></b>	<b>8,829</b>	<b>8,331</b>

<sup>1</sup> Includes write-offs of fully depreciated assets. <sup>2</sup> Impairment charges recorded in 2017 relate to assets for which the recoverable amount was determined based on value-in-use. Recoverable amounts for these impaired assets were not material as of 31 December 2017. <sup>3</sup> As of 31 December 2017, contractual commitments to purchase property in the future amounted to approximately CHF 0.3 billion (31 December 2016: approximately CHF 0.3 billion). <sup>4</sup> Includes CHF 28 million related to leased assets, mainly IT hardware and communication. <sup>5</sup> Consists of CHF 791 million related to Internally generated software, CHF 197 million related to Own-used properties and CHF 35 million related to Leasehold improvements. <sup>6</sup> Reflects reclassifications to Properties held for sale (CHF 40 million on a net basis) of properties sold in 2017.

## Note 15 Goodwill and intangible assets

### Introduction

UBS performs an impairment test on its goodwill assets on an annual basis or when indicators of impairment exist. UBS considers the segments, as reported in Note 2a, as separate cash-generating units (CGUs). The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, with the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount. As of 31 December 2017, total goodwill recognized on the balance sheet was CHF 6.2 billion, of which CHF 1.3 billion, CHF 3.4 billion and CHF 1.4 billion was carried by Wealth Management, Wealth Management Americas and Asset Management, respectively. Based on the impairment testing methodology described below, UBS concluded that the goodwill balances as of 31 December 2017 allocated to these segments remain recoverable and thus were not impaired.

### Methodology for goodwill impairment testing

The recoverable amounts are determined using a discounted cash flow model, which has been adapted to use inputs that consider features of the banking business and its regulatory environment. The recoverable amount of a segment is the sum of the discounted earnings attributable to shareholders from the first three forecast years and the terminal value, adjusted for the effect of the capital assumed to be needed over the next three years and to support the perpetual growth implied by the long-term growth rate. The terminal value, which covers all periods beyond the third year, is calculated on the basis of the forecast of third-year profit, the discount rate and the long-term growth rate, as well as the implied perpetual capital growth.

The carrying amount for each segment is determined by reference to the Group's equity attribution framework. Within this framework, which is described in the "Capital management" section of this report, we attribute equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator, their goodwill and intangible assets as well as equity directly associated with activity that Group ALM manages centrally on behalf of the business divisions. The framework is primarily used for purposes of measuring the performance of the businesses and includes certain management assumptions. Attributed equity equals the capital that a segment requires to conduct its business and is

considered an appropriate starting point from which to determine the carrying value of the segments. The attributed equity methodology is aligned with the business planning process, the inputs from which are used in calculating the recoverable amounts of the respective CGU.

→ Refer to the "Capital management" section of this report for more information on the equity attribution framework

### Assumptions

Valuation parameters used within the Group's impairment test model are linked to external market information, where applicable. The model used to determine the recoverable amount is most sensitive to changes in the forecast earnings available to shareholders in years one to three, to changes in the discount rates and to changes in the long-term growth rate. The applied long-term growth rate is based on long-term economic growth rates for different regions worldwide. Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the BoD.

The discount rates are determined by applying a capital asset pricing model-based approach, as well as considering quantitative and qualitative inputs from both internal and external analysts and the view of management. The discount rates were unchanged between 2016 and 2017.

Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Forecast earnings available to shareholders were changed by 20%, the discount rates were changed by 1.5 percentage points and the long-term growth rates were changed by 0.75 percentage points. Under all scenarios, reasonably possible changes in key assumptions did not result in an impairment of goodwill or intangible assets that would be material to the consolidated financial statements or to the reported financial performance of any of the business divisions.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce IFRS equity and net profit. It would not affect cash flows and, as goodwill is required to be deducted from capital under the Basel III capital framework, no effect would be expected on the Group total capital ratios.



## Note 15 Goodwill and intangible assets (continued)

### Discount and growth rates

In %	Discount rates		Growth rates	
	31.12.17	31.12.16	31.12.17	31.12.16
Wealth Management	9.0	9.0	1.7	1.7
Wealth Management Americas	9.0	9.0	2.4	2.4
Asset Management	9.0	9.0	2.4	2.4
Investment Bank	11.0	11.0	2.4	2.4

CHF million	Goodwill		Intangible assets		31.12.17	31.12.16
	Total	Infrastructure	Customer relationships, contractual rights and other	Total		
<b>Historical cost</b>						
Balance at the beginning of the year	6,311	773	739	1,512	7,823	7,821
Additions	37		64	64	101	24
Disposals	(27)		(34)	(34)	(61)	(3)
Write-offs				0	0	(75)
Foreign currency translation	(139)	(33)	(2)	(35)	(174)	57
Balance at the end of the year	6,182	741	766	1,507	7,689	7,823
<b>Accumulated amortization and impairment</b>						
Balance at the beginning of the year		626	641	1,267	1,267	1,253
Amortization		37	32	70	70	91
Impairment <sup>1</sup>			0	0	0	0
Disposals			(15)	(15)	(15)	(1)
Write-offs				0	0	(75)
Foreign currency translation		(27)	(3)	(29)	(29)	(1)
Balance at the end of the year		637	655	1,292	1,292	1,267
<b>Net book value at the end of the year</b>	<b>6,182</b>	<b>104</b>	<b>111</b>	<b>215</b>	<b>6,398</b>	<b>6,556</b>

<sup>1</sup> Impairment charges recorded in 2017 and 2016 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 0 million for 2017 and CHF 3 million for 2016).

The table below presents goodwill and intangible assets by segment for the year ended 31 December 2017.

CHF million	Wealth Management	Wealth Management Americas	Investment Bank	Asset Management	Corporate Center – Services	Total
<b>Goodwill</b>						
Balance at the beginning of the year	1,303	3,571	36	1,401		6,311
Additions	37					37
Disposals	(2)			(25)		(27)
Foreign currency translation	8	(151)	(2)	6		(139)
<b>Balance at the end of the year</b>	<b>1,346</b>	<b>3,420</b>	<b>34</b>	<b>1,382</b>		<b>6,182</b>
<b>Intangible assets</b>						
Balance at the beginning of the year	40	152	41	4	9	245
Additions / transfers	47	17				64
Disposals	(19)					(19)
Amortization	(7)	(41)	(12)	(3)	(7)	(70)
Impairment		0				0
Foreign currency translation	2	(6)	(1)	0		(5)
<b>Balance at the end of the year</b>	<b>63</b>	<b>121</b>	<b>28</b>	<b>1</b>	<b>2</b>	<b>215</b>

## Note 15 Goodwill and intangible assets (continued)

The table below presents estimated, aggregated amortization expenses for intangible assets.

<i>CHF million</i>	Intangible assets
<b>Estimated, aggregated amortization expenses for:</b>	
2018	63
2019	49
2020	42
2021	11
2022	11
Thereafter	35
Not amortized due to indefinite useful life	5
<b>Total</b>	<b>215</b>

## Note 16 Other assets

<i>CHF million</i>	<b>31.12.17</b>	31.12.16
Prime brokerage receivables <sup>1</sup>	<b>19,080</b>	9,828
Recruitment loans to financial advisors	<b>2,553</b>	3,087
Other loans to financial advisors	<b>565</b>	471
Bail deposit <sup>2</sup>	<b>1,337</b>	1,213
Accrued interest income	<b>577</b>	526
Accrued income – other	<b>781</b>	818
Prepaid expenses	<b>1,013</b>	1,010
Settlement and clearing accounts	<b>716</b>	516
VAT and other tax receivables	<b>359</b>	292
Properties and other non-current assets held for sale	<b>95</b>	111
Assets of disposal group held for sale <sup>3</sup>	<b>0</b>	5,137
Other	<b>2,630</b>	2,427
<b>Total other assets</b>	<b>29,706</b>	25,436

<sup>1</sup> Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage receivables are mainly comprised of margin lending receivables. <sup>2</sup> Refer to Note 20b item 1 for more information. <sup>3</sup> Refer to Note 30 for more information.

## Balance sheet notes: liabilities

### Note 17 Due to banks and customers

CHF million	31.12.17	31.12.16
Due to banks	7,533	10,645
Due to customers	408,999	423,672
<i>of which: demand deposits</i>	188,580	194,044
<i>of which: retail savings / deposits</i>	161,828	170,729
<i>of which: time deposits</i>	47,391	52,716
<i>of which: fiduciary deposits</i>	11,200	6,184
Total due to banks and customers	416,532	434,317

### Note 18 Financial liabilities designated at fair value

CHF million	31.12.17	31.12.16
<b>Issued debt instruments</b>		
Equity-linked <sup>1</sup>	34,162	29,831
Rates-linked	5,811	10,150
Credit-linked	2,937	4,101
Fixed-rate	3,921	2,972
Other	2,671	2,875
Total issued debt instruments	49,502	49,930
<i>of which: issued by UBS AG with original maturity greater than one year<sup>2,3</sup></i>	37,266	36,347
<b>Over-the-counter debt instruments</b>		
Equity-linked <sup>1</sup>	1,350	1,992
Other	2,967	2,671
Total over-the-counter debt instruments	4,317	4,663
<i>of which: issued by UBS AG with original maturity greater than one year<sup>2,4</sup></i>	3,049	4,210
<b>Repurchase agreements</b>	375	395
<b>Loan commitments and guarantees<sup>5</sup></b>	9	29
Total	54,202	55,017
<i>of which: life-to-date own credit (gain) / loss</i>	195	(141)

<sup>1</sup> Includes investment fund unit-linked instruments issued. <sup>2</sup> Issued by the legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. <sup>3</sup> More than 99% of the balance as of 31 December 2017 was unsecured (31 December 2016: more than 99% of the balance was unsecured). <sup>4</sup> More than 40% of the balance as of 31 December 2017 was unsecured (31 December 2016: more than 35% of the balance was unsecured). <sup>5</sup> Loan commitments recognized as Financial liabilities designated at fair value until drawn and recognized as Loans. See Note 1a item 3o for more information.

As of 31 December 2017 and 31 December 2016, the contractual redemption amount at maturity of financial liabilities designated at fair value through profit or loss was not materially different from the carrying value.

The table on the following page shows the residual contractual maturity of the carrying value of financial liabilities designated at fair value, split between fixed-rate and floating-rate instruments based on the contractual terms, and does not consider any early redemption features. Interest rate ranges for

future interest payments related to these financial liabilities designated at fair value have not been included in the table on the following page as a majority of these liabilities are structured products, and therefore the future interest payments are highly dependent upon the embedded derivative and prevailing market conditions at the time each interest payment is made.

→ Refer to Note 25d for maturity information on an undiscounted cash flow basis

## Note 18 Financial liabilities designated at fair value (continued)

### Contractual maturity of carrying value

CHF million	2018	2019	2020	2021	2022	2023–2027	Thereafter	Total 31.12.17	Total 31.12.16
<b>UBS AG<sup>1</sup></b>									
Non-subordinated debt									
Fixed-rate	3,339	1,350	872	401	571	511	3,610	10,653	9,505
Floating-rate	16,428	5,660	4,418	1,297	1,883	4,983	6,497	41,167	42,757
Subtotal	19,767	7,010	5,290	1,697	2,455	5,494	10,107	51,820	52,262
<b>Other subsidiaries<sup>2</sup></b>									
Non-subordinated debt									
Fixed-rate	90	797	52	74	7	345	136	1,502	1,768
Floating-rate	330	18	194	0	48	27	263	879	987
Subtotal	420	816	246	74	55	372	399	2,382	2,755
<b>Total</b>	<b>20,187</b>	<b>7,826</b>	<b>5,536</b>	<b>1,772</b>	<b>2,510</b>	<b>5,866</b>	<b>10,506</b>	<b>54,202</b>	<b>55,017</b>

<sup>1</sup> Comprises instruments issued by the legal entity UBS AG. <sup>2</sup> Comprises instruments issued by subsidiaries of UBS AG.

## Note 19 Debt issued held at amortized cost

CHF million	31.12.17	31.12.16
Certificates of deposit	23,831	20,207
Commercial paper	23,532	1,653
Other short-term debt	3,590	4,318
<b>Short-term debt<sup>1</sup></b>	<b>50,953</b>	<b>26,178</b>
Senior fixed-rate bonds	32,268	27,008
<i>of which: issued by UBS AG with original maturity greater than one year<sup>2</sup></i>	<i>32,256</i>	<i>26,850</i>
Senior unsecured debt that contributes to total loss-absorbing capacity	27,233	16,890
Covered bonds	4,112	5,836
Subordinated debt	16,555	19,325
<i>of which: high-trigger loss-absorbing additional tier 1 capital instruments</i>	<i>5,187</i>	<i>5,429</i>
<i>of which: low-trigger loss-absorbing additional tier 1 capital instruments</i>	<i>2,383</i>	<i>2,342</i>
<i>of which: low-trigger loss-absorbing tier 2 capital instruments</i>	<i>8,286</i>	<i>10,429</i>
<i>of which: non-Basel III-compliant tier 2 capital instruments</i>	<i>700</i>	<i>1,125</i>
Debt issued through the central bond institutions of the Swiss regional or cantonal banks	8,345	8,302
Other long-term debt	87	112
<i>of which: issued by UBS AG with original maturity greater than one year<sup>2</sup></i>	<i>66</i>	<i>94</i>
<b>Long-term debt<sup>3</sup></b>	<b>88,599</b>	<b>77,472</b>
<b>Total debt issued held at amortized cost<sup>4</sup></b>	<b>139,551</b>	<b>103,649</b>

<sup>1</sup> Debt with an original maturity of less than one year. <sup>2</sup> Issued by the legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. 100% of the balance as of 31 December 2017 was unsecured (31 December 2016: 100% of the balance was unsecured). <sup>3</sup> Debt with original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. <sup>4</sup> Net of bifurcated embedded derivatives, the fair value of which was not material for the periods presented.

The Group uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In certain cases, the Group applies hedge accounting for interest rate risk as discussed in Note 1a item 3k and Note 12. As a result of applying hedge accounting, the life-

to-date adjustment to the carrying value of debt issued was an increase of CHF 34 million as of 31 December 2017 and an increase of CHF 490 million as of 31 December 2016, reflecting changes in fair value due to interest rate movements.

## Note 19 Debt issued held at amortized cost (continued)

Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All of the subordinated debt instruments outstanding as of 31 December 2017 pay a fixed rate of interest.

The table below shows the residual contractual maturity of the carrying value of debt issued, split between fixed-rate and floating-rate based on the contractual terms, and does not consider any early redemption features. The effects from interest rate swaps, which are used to hedge various fixed-rate debt issuances by changing the repricing characteristics into those similar to floating-rate debt, are also not considered in the table below.

→ Refer to Note 25d for maturity information on an undiscounted cash flow basis

### Contractual maturity of carrying value

<i>CHF million, except where indicated</i>	2018	2019	2020	2021	2022	2023-2027	Thereafter	Total 31.12.17	Total 31.12.16
<b>UBS Group AG<sup>1</sup></b>									
Subordinated debt									
Fixed-rate	0	0	0	0	0	0	7,570	7,570	7,771
Interest rates (range in %)							5.8–7.1		
Subtotal	0	0	0	0	0	0	7,570	7,570	7,771
<b>UBS AG<sup>2</sup></b>									
Non-subordinated debt									
Fixed-rate	38,470	3,975	7,964	4,107	1,580	0	18	56,115	42,724
Interest rates (range in %)	0–6.6	2.4–4.0	0–4.9	0.1–1.4	4.0–4.0				
Floating-rate	21,158	4,818	3,926	0	0	0	1,223	31,125	15,937
Subordinated debt									
Fixed-rate	0	0	0	0	1,912	7,073	0	8,985	11,554
Interest rates (range in %)					7.6–7.6	4.8–8.8			
Subtotal	59,628	8,793	11,891	4,107	3,492	7,073	1,241	96,225	70,215
<b>Other subsidiaries<sup>3</sup></b>									
Non-subordinated debt									
Fixed-rate	805	747	2,186	2,940	4,535	15,723	2,855	29,791	23,843
Interest rates (range in %)	0.4–3.8	0.6–2.9	0.1–2.8	0.1–3.0	0.1–3.4	0.1–4.1	0.2–4.3		
Floating-rate	1	0	293	976	2,535	2,162	0	5,966	1,820
Subtotal	806	746	2,479	3,916	7,070	17,885	2,855	35,756	25,663
<b>Total</b>	<b>60,434</b>	<b>9,540</b>	<b>14,370</b>	<b>8,022</b>	<b>10,562</b>	<b>24,958</b>	<b>11,666</b>	<b>139,551</b>	<b>103,649</b>

<sup>1</sup> Comprises debt issued by the legal entity UBS Group AG. <sup>2</sup> Comprises debt issued by the legal entity UBS AG. <sup>3</sup> Comprises debt issued by other direct subsidiaries of UBS Group AG and by subsidiaries of UBS AG.

## Note 20 Provisions and contingent liabilities

### a) Provisions

<i>CHF million</i>	Operational risks <sup>1</sup>	Litigation, regulatory and similar matters <sup>2</sup>	Restructuring	Loan commitments and guarantees	Real estate	Employee benefits <sup>5</sup>	Other	Total 31.12.17	Total 31.12.16
Balance at the beginning of the year	50	3,261	498	54	142	77	91	4,174	4,164
Additions from acquired companies	0	0	0	0	0	0	7	7	0
Increase in provisions recognized in the income statement	15	682	220	11	3	12	45	988	1,433
Release of provisions recognized in the income statement	(7)	(209)	(80)	(32)	(2)	(21)	(20)	(371)	(288)
Provisions used in conformity with designated purpose	(13)	(1,230)	(313)	0	(12)	(1)	(34)	(1,604)	(1,152)
Capitalized reinstatement costs	0	0	0	0	7	0	0	7	(2)
Reclassifications	0	0	0	0	0	0	0	0	10
Foreign currency translation / unwind of discount	(3)	(59)	(2)	0	(5)	1	1	(68)	10
<b>Balance at the end of the year</b>	<b>43</b>	<b>2,444</b>	<b>322<sup>3</sup></b>	<b>33</b>	<b>134<sup>4</sup></b>	<b>68</b>	<b>89</b>	<b>3,133</b>	4,174

<sup>1</sup> Comprises provisions for losses resulting from security risks and transaction processing risks. <sup>2</sup> Comprises provisions for losses resulting from legal, liability and compliance risks. <sup>3</sup> Primarily consists of personnel-related restructuring provisions of CHF 83 million as of 31 December 2017 (31 December 2016: CHF 150 million) and provisions for onerous lease contracts of CHF 235 million as of 31 December 2017 (31 December 2016: CHF 348 million). <sup>4</sup> Consists of reinstatement costs for leasehold improvements of CHF 92 million as of 31 December 2017 (31 December 2016: CHF 87 million) and provisions for onerous lease contracts of CHF 41 million as of 31 December 2017 (31 December 2016: CHF 55 million). <sup>5</sup> Includes provisions for sabbatical and anniversary awards as well as provisions for severance that are not part of restructuring provisions.

Restructuring provisions primarily relate to onerous lease contracts and severance payments. The use of onerous lease provisions is driven by the maturities of the underlying lease contracts. Severance-related provisions are used within a short time period, usually within six months, but potential changes in amount may be triggered when natural staff attrition reduces

the number of people affected by a restructuring and therefore the estimated costs.

Information on provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 20b. There are no material contingent liabilities associated with the other classes of provisions.

### b) Litigation, regulatory and similar matters

The Group operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this Note may refer to UBS Group AG and / or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where the Group may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which the Group believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. The Group makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that the Group has a present legal or

constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against the Group, but are nevertheless expected to be, based on the Group's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to such matters could be significant.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

## Note 20 Provisions and contingent liabilities (continued)

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either (a) we have not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard, or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in the "Provisions" table in Note 20a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require us to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although we therefore cannot

provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, we believe that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions. Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the Non-Prosecution Agreement (NPA) described in item 5 of this Note, which we entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with our submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate (LIBOR), was terminated by the DOJ based on its determination that we had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a fine and is subject to probation through January 2020. A guilty plea to, or conviction of, a crime could have material consequences for UBS. Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate our participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining our capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of this report.

### Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit<sup>1</sup>

CHF million	Wealth			Asset			CC –		Total 31.12.17	Total 31.12.16
	Wealth Manage- ment	Wealth Manage- ment Americas	Personal & Corporate Banking	Manage- ment	Investment Bank	CC – Services	CC – Group ALM	Non-core and Legacy Portfolio		
Balance at the beginning of the year	292	425	78	5	616	259	0	1,585	<b>3,261</b>	2,983
Increase in provisions recognized in the income statement	30	158	3	6	8	248	0	229	<b>682</b>	856
Release of provisions recognized in the income statement	(4)	(12)	(1)	(9) <sup>2</sup>	(49)	(6)	0	(129)	<b>(209)</b>	(48)
Provisions used in conformity with designated purpose	(135)	(207)	(2)	(1)	(216)	(262)	0	(406)	<b>(1,230)</b>	(554)
Foreign currency translation / unwind of discount	24	(17)	2	0	(15)	1	0	(55)	<b>(59)</b>	25
<b>Balance at the end of the year</b>	<b>207</b>	<b>348</b>	<b>79</b>	<b>1</b>	<b>345</b>	<b>240</b>	<b>0</b>	<b>1,224</b>	<b>2,444</b>	3,261

<sup>1</sup> Provisions, if any, for the matters described in this Note are recorded in Wealth Management (item 3), Wealth Management Americas (item 4), the Investment Bank (item 7) and Corporate Center – Non-core and Legacy Portfolio (item 2). Provisions, if any, for the matters described in items 1 and 6 of this Note are allocated between Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this Note in item 5 are allocated between the Investment Bank, Corporate Center – Services and Corporate Center – Non-core and Legacy Portfolio. <sup>2</sup> In 2017, a release of CHF 5 million was recognized in Provisions for litigation, regulatory and similar matters, with a corresponding increase in Other provisions.

## Note 20 Provisions and contingent liabilities (continued)

### 1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that the implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration (FTA) to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests.

The Swiss Federal Administrative Court ruled in 2016 that in the administrative assistance proceedings related to a French bulk request, UBS has the right to appeal all final FTA client data disclosure orders.

Since 2013, UBS (France) S.A. and UBS AG and certain former employees have been under investigation in France for alleged complicity in having illicitly solicited clients on French territory and regarding the laundering of proceeds of tax fraud and of banking and financial solicitation by unauthorized persons. In connection with this investigation, the investigating judges ordered UBS AG to provide bail ("*caution*") of EUR 1.1 billion and UBS (France) S.A. to post bail of EUR 40 million, which was reduced on appeal to EUR 10 million.

In February 2016, the investigating judges notified UBS AG and UBS (France) S.A. that they have closed their investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation ("*réquisitoire*"). In March 2017, the investigating judges issued the trial order ("*ordonnance de renvoi*") that charges UBS AG and UBS (France) S.A., as well as various former employees, with illicit solicitation of clients on French territory and with participation in the laundering of the proceeds of tax fraud, and which transfers the case to court. The trial schedule has not yet been announced. In October 2017, the Investigation Chamber of the Court of Appeals decided that UBS (France) S.A. shall not be constituted as a civil party in the guilty plea proceedings against the former UBS (France) S.A. Head of Front Office. UBS (France) S.A. has appealed this decision to the French Supreme Court ("*Cour de cassation*").

In 2016, UBS was notified by the Belgian investigating judge that it is under formal investigation ("*inculpé*") regarding the laundering of proceeds of tax fraud and of banking, financial solicitation by unauthorized persons and serious tax fraud.

In 2015, UBS received inquiries from the US Attorney's Office for the Eastern District of New York and from the US Securities and Exchange Commission (SEC), which are investigating potential sales to US persons of bearer bonds and other unregistered securities in possible violation of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the registration requirements of the US securities laws. UBS is cooperating with the authorities in these investigations. In 2018, UBS was informed by the US Attorney's Office and the SEC that they have closed their investigations and that they will not take any action.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

Our balance sheet at 31 December 2017 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities (RMBS) and was a purchaser and seller of US residential mortgages. A subsidiary of UBS, UBS Real Estate Securities Inc. (UBS RESI), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

UBS was not a significant originator of US residential loans. A branch of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008, and securitized less than half of these loans.



## Note 20 Provisions and contingent liabilities (continued)

*Lawsuits related to contractual representations and warranties concerning mortgages and RMBS:* When UBS acted as an RMBS sponsor or mortgage seller, it generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, UBS was in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. In 2012, certain RMBS trusts filed an action (Trustee Suit) in the US District Court for the Southern District of New York (SDNY) seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion. Approximately 9,000 loans were at issue in a bench trial in the SDNY in 2016, following which the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. In October 2017, UBS and certain holders of the RMBS in the Trustee Suit entered into an agreement under which UBS has agreed to pay an aggregate of USD 543 million into the relevant RMBS trusts, plus certain attorneys' fees. A portion of these settlement costs will be borne by other parties that indemnified UBS. The agreement is subject to the trustee for the RMBS trusts becoming a party thereto by 9 March 2018. The trustee for the RMBS trusts has evaluated the proposed settlement under the agreement between UBS and the RMBS holders and UBS has been in discussions with the trustee about the terms on which it would become a party to a settlement. Giving effect to a settlement of the Trustee Suit, UBS considers claims relating to substantially all loan repurchase demands to be resolved, and believes that new demands to repurchase US residential mortgage loans are time-barred under a decision rendered by the New York Court of Appeals.

*Mortgage-related regulatory matters:* In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and subsequently provided a revised list of transactions. UBS has provided information in response to this subpoena. UBS has also received and responded to subpoenas

from the New York State Attorney General (NYAG) and other state attorneys general relating to UBS's RMBS business. In 2017, the NYAG identified a number of transactions that are the focus of its inquiry. In addition, UBS responded to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US Attorney's Office for Connecticut and the DOJ) and the SEC relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. UBS is cooperating with the authorities in these matters.

Our balance sheet at 31 December 2017 reflected a provision with respect to matters described in this item 2 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. (now UBS Europe SE, Luxembourg branch) and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier (CSSF). Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds faced severe losses, and the Luxembourg funds are in liquidation. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees, seeking amounts aggregating approximately EUR 2.1 billion, which includes amounts that the funds may be held liable to pay the trustee for the liquidation of BMIS (BMIS Trustee).

## Note 20 Provisions and contingent liabilities (continued)

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A large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff fraud. The majority of these cases have been filed in Luxembourg, where decisions that the claims in eight test cases were inadmissible have been affirmed by the Luxembourg Court of Appeal, and the Luxembourg Supreme Court has dismissed a further appeal in one of the test cases.

In the US, the BMIS Trustee filed claims against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. In 2014, the US Supreme Court rejected the BMIS Trustee's motion for leave to appeal decisions dismissing all claims except those for the recovery of fraudulent conveyances and preference payments. In 2016, the Bankruptcy Court dismissed the remaining claims against the UBS entities. The BMIS Trustee appealed. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to those made by the BMIS Trustee, and seeking unspecified damages. These claims have either been voluntarily withdrawn or dismissed on the basis that the courts did not have jurisdiction to hear the claims against the UBS entities. In 2016, the plaintiff in one of those claims appealed the dismissal. In February 2018, the United States Court of Appeals for the Second Circuit affirmed the dismissal of the plaintiff's claim.

### 4. Puerto Rico

Declines since 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (funds) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (UBS PR) have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of USD 2.4 billion, of which claims with aggregate claimed damages of USD 1.4 billion have been resolved through settlements, arbitration or withdrawal of the claim. The claims are filed by clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and / or who used their UBS account assets as collateral for UBS non-purpose loans; customer complaint and arbitration allegations include fraud, misrepresentation and unsuitability of the funds and of the loans. A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants' motion to dismiss was denied.

Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management and the co-manager of certain of the funds, seeking damages for investor losses in the funds during the period from May 2008 through May 2014. In 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendant's motion for summary judgment based on a forum selection clause in the loan agreements. The Puerto Rico Supreme Court reversed that decision and remanded the case back to the trial court for reconsideration. On reconsideration the trial court granted defendant's motion and dismissed the action.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico (OCFI) in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority (FINRA) announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. We also understand that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. We are cooperating with the authorities in this inquiry.

In 2011, a purported derivative action was filed on behalf of the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. In 2016, the court granted the System's request to join the action as a plaintiff, but ordered that plaintiffs must file an amended complaint. In 2017, the court denied defendants' motion to dismiss the amended complaint.

## Note 20 Provisions and contingent liabilities (continued)

Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain closed-end funds and certain members of UBS PR senior management, seeking damages for investor losses in the funds during the period from January 2008 through May 2012. In 2016, the court denied plaintiffs' motion for class certification. In March 2017, the US Court of Appeals for the First Circuit denied plaintiffs' petition seeking permission to bring an interlocutory appeal challenging the denial of their motion for class certification.

Beginning in 2015, certain agencies and public corporations of the Commonwealth of Puerto Rico (Commonwealth) defaulted on certain interest payments, in 2016, the Commonwealth defaulted on payments on its general obligation debt (GO Bonds), and in 2017 the Commonwealth defaulted on payments on its debt backed by the Commonwealth's Sales and Use Tax (COFINA Bonds) as well as on bonds issued by the Commonwealth's Employee Retirement System (ERS Bonds). The funds hold significant amounts of both COFINA and ERS Bonds and the defaults on interest payments are expected to adversely affect dividends from the funds. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors' rights on the Puerto Rico bonds continue to be in effect. In 2016, US federal legislation created an oversight board with power to oversee Puerto Rico's finances and to restructure its debt. The oversight board is authorized to impose, and has imposed, a stay on exercise of creditors' rights. In May and June 2017, the oversight board placed the GO, COFINA and ERS Bonds, among others, into a bankruptcy-like proceeding under the supervision of a Federal District Judge as authorized by the oversight board's enabling statute. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth's finances, or any restructuring of the Commonwealth's obligations may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

Our balance sheet at 31 December 2017 reflected provisions with respect to matters described in this item 4 in amounts that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that we have recognized.

### 5. Foreign exchange, LIBOR and benchmark rates, and other trading practices

*Foreign exchange-related regulatory matters:* Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes our

precious metals and related structured products businesses. Numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. In 2014 and 2015, UBS reached settlements with the UK Financial Conduct Authority (FCA) and the US Commodity Futures Trading Commission (CFTC) in connection with their foreign exchange investigations, FINMA issued an order concluding its formal proceedings relating to UBS's foreign exchange and precious metals businesses, and the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Connecticut Department of Banking issued a Cease and Desist Order and assessed monetary penalties against UBS AG. In addition, the DOJ's Criminal Division (Criminal Division) terminated the 2012 Non-Prosecution Agreement (NPA) with UBS AG related to UBS's submissions of benchmark interest rates and UBS AG pleaded guilty to one count of wire fraud, paid a fine and is subject to probation through January 2020. In January 2018, UBS reached a settlement with the CFTC in connection with the CFTC's precious metals investigations. As part of that settlement, UBS paid a USD 15 million civil monetary penalty. UBS has ongoing obligations to cooperate with these authorities and to undertake certain remediation. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ (Antitrust Division) and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses. Refer to Note 20b in the "Consolidated financial statements" section of the Annual Report 2016 for more information on regulatory actions related to foreign exchange and precious metals and grants of conditional immunity or leniency. Investigations relating to foreign exchange and precious metals matters by certain authorities remain ongoing notwithstanding these resolutions.

*Foreign exchange-related civil litigation:* Putative class actions have been filed since 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In 2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 2003. The complaints assert claims under the Commodity Exchange Act (CEA) and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

## Note 20 Provisions and contingent liabilities (continued)

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A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 (ERISA) for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal. The appeals court heard oral argument in June 2017.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of a putative class of persons and businesses in the US who directly purchased foreign currency from the defendants and their co-conspirators for their own end use. That action was transferred to federal court in New York. In March 2017, the court granted UBS's (and the other banks') motions to dismiss the complaint. The plaintiffs filed an amended complaint in August 2017.

In 2016, a putative class action was filed in federal court in New York against UBS and numerous other banks on behalf of a putative class of persons and entities who had indirectly purchased foreign exchange instruments from a defendant or co-conspirator in the US. The complaint asserts claims under federal and state antitrust laws. In response to defendants' motion to dismiss, plaintiffs agreed to dismiss their complaint. In April and June 2017, two new putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of different proposed classes of indirect purchasers of currency, and a consolidated complaint was filed in June 2017.

In 2015, UBS was added to putative class actions pending against other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases sought to amend their complaints to add new allegations about UBS, which the court granted. The plaintiffs filed amended complaints in June 2017. In March 2017, the court in New York granted UBS's motion to dismiss the platinum and palladium action. In May 2017, plaintiffs in the platinum and palladium action filed an amended complaint that did not allege claims against UBS.

*LIBOR and other benchmark-related regulatory matters:* Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office (SFO), the Monetary Authority of Singapore (MAS), the Hong Kong Monetary Authority (HKMA), FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted or are continuing to conduct investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. In 2012, UBS reached settlements relating to benchmark interest rates with the FSA, the CFTC and the Criminal Division of the DOJ, and FINMA issued an order in its proceedings with respect to UBS relating to benchmark interest rates. In addition, UBS entered into settlements with the European Commission (EC) and with the Swiss Competition Commission (WEKO) regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives. UBS has ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation with respect to benchmark interest rate submissions. UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and WEKO, in connection with potential antitrust or competition law violations related to certain rates. However, UBS has not reached a final settlement with WEKO as the Secretariat of WEKO has asserted that UBS does not qualify for full immunity. Refer to Note 20b in the "Consolidated financial statements" section of the Annual Report 2016 for more information on regulatory actions relating to benchmark rates and grants of conditional immunity or leniency. Investigations by certain governmental authorities remain ongoing notwithstanding these resolutions.

*LIBOR and other benchmark-related civil litigation:* A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. All of the complaints allege manipulation, through various means, of various benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, USD and SGD SIBOR and SOR, Australian BBSW and USD ISDAFIX, and seek unspecified compensatory and other damages under varying legal theories.

## Note 20 Provisions and contingent liabilities (continued)

In 2013, the US district court in the USD LIBOR action dismissed the federal antitrust and racketeering claims of certain USD LIBOR plaintiffs and a portion of their claims brought under the CEA and state common law. Certain plaintiffs appealed the decision to the Second Circuit, which, in 2016, vacated the district court's ruling finding no antitrust injury and remanded the case back to the district court for a further determination on whether plaintiffs have antitrust standing. In December 2016, the district court again dismissed plaintiffs' antitrust claims, this time for lack of personal jurisdiction over UBS and other foreign banks. Certain plaintiffs appealed that decision to the Second Circuit in 2017. In 2018, the district court denied certain plaintiffs' motions for class certification. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims. In 2015, the same court dismissed plaintiff's federal racketeering claims and affirmed its previous dismissal of plaintiff's antitrust claims. In 2017, the court also dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds, as did the court in the CHF LIBOR action. Also in 2017, the courts in the EURIBOR and the SIBOR and SOR lawsuits dismissed the cases as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs in the CHF LIBOR and SIBOR and SOR actions have filed amended complaints following the dismissals, which UBS and other defendants have moved to dismiss. UBS and other defendants in other lawsuits have also moved to dismiss the GBP LIBOR and Australian BBSW actions. In 2016, UBS entered into an agreement with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement has received preliminary court approval and remains subject to final approval. Since 2014, putative class actions have been filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX. The court has given preliminary approval of a settlement agreement under which UBS would pay USD 14 million to settle the case in its entirety.

**Government bonds:** Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY, and a consolidated complaint was filed in November 2017. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and orders referred to above, our balance sheet at 31 December 2017 reflected a provision in an

amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver.

FINMA has issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among other things, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 December 2017 reflected a provision with respect to matters described in this item 6 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 7. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission (SFC) has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. The SFC has previously indicated that it intended to take enforcement action against UBS and certain employees in relation to certain of these offerings. In March 2018, the SFC issued a decision notice in relation to one of the offerings under investigation. The notice provides for a fine of HKD 119 million and a suspension of UBS Securities Hong Kong Limited's ability to act as a sponsor for Hong Kong listed initial public offerings for 18 months. UBS intends to appeal the decision.

## Note 21 Other liabilities

CHF million	31.12.17	31.12.16
Prime brokerage payables <sup>1</sup>	29,646	31,973
Amounts due under unit-linked investment contracts	11,523	9,286
Compensation-related liabilities	7,674	7,421
<i>of which: accrued expenses</i>	2,670	2,423
<i>of which: Deferred Contingent Capital Plan</i>	1,993	1,625
<i>of which: other deferred compensation plans</i>	2,086	2,107
<i>of which: net defined benefit pension and post-employment liabilities<sup>2</sup></i>	925	1,266
Third-party interest in consolidated investment funds	254	701
Settlement and clearing accounts	1,395	1,012
Current and deferred tax liabilities <sup>3</sup>	912	949
VAT and other tax payables	415	503
Deferred income	150	168
Accrued interest expenses	1,513	1,553
Other accrued expenses	2,444	2,448
Liabilities of disposal group held for sale <sup>4</sup>	0	5,213
Other	1,138	793
<b>Total other liabilities</b>	<b>57,064</b>	<b>62,020</b>

<sup>1</sup> Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage payables are mainly comprised of client securities financing and deposits. <sup>2</sup> Refer to Note 26 for more information. <sup>3</sup> Refer to Note 8 for more information. <sup>4</sup> Refer to Note 30 for more information.

# Additional information

## Note 22 Fair value measurement

This Note provides fair value measurement information for both financial and non-financial instruments and is structured as follows:

- a) Valuation principles
- b) Valuation governance
- c) Fair value hierarchy
- d) Valuation adjustments
- e) Transfers between Level 1 and Level 2
- f) Level 3 instruments: valuation techniques and inputs
- g) Level 3 instruments: sensitivity to changes in unobservable input assumptions
- h) Level 3 instruments: movements during the period
- i) Financial instruments not measured at fair value

### a) Valuation principles

Fair value is defined as the price that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market (or most advantageous market, in the absence of a principal market) as of the measurement date. In measuring fair value, the Group uses various valuation approaches and applies a hierarchy for prices and inputs that maximizes the use of observable market data, if available.

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which the instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 – valuation techniques for which significant inputs are not based on observable market data.

If available, fair values are determined using quoted prices in active markets for identical assets or liabilities. An active market is one in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing data on an ongoing basis. Assets and liabilities that are quoted and traded in an active market are valued at the currently quoted price multiplied by the number of units of the instrument held.

Where the market for a financial instrument or non-financial asset or liability is not active, fair value is established using a valuation technique, including pricing models. Valuation techniques involve the use of estimates, the extent of which depends on the complexity of the instrument and the availability

of market-based data. Valuation adjustments may be made to allow for additional factors, including model, liquidity, credit and funding risks, which are not explicitly captured within the valuation technique, but which would nevertheless be considered by market participants when establishing a price. The limitations inherent in a particular valuation technique are considered in the determination of an asset or liability's classification within the fair value hierarchy.

Many cash instruments and over-the-counter (OTC) derivative contracts have bid and offer prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Offer prices represent the lowest price that a party is willing to accept for an asset. In general, long positions are measured at a bid price and short positions at an offer price, reflecting the prices at which the instruments could be transferred under normal market conditions. Offsetting positions in the same financial instrument are marked at the mid-price within the bid-offer spread.

Generally, the unit of account for a financial instrument is the individual instrument, and UBS applies valuation adjustments at an individual instrument level, consistent with that unit of account. However, if certain conditions are met, UBS may estimate the fair value of a portfolio of financial assets and liabilities with substantially similar and offsetting risk exposures on the basis of the net open risks.

For transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially recognized at the transaction price. This initial recognition amount may differ from the fair value obtained using the valuation technique. Any such difference is deferred and not recognized in the income statement and referred to as deferred day-1 profit or loss.

→ Refer to Note 22d for more information

## Note 22 Fair value measurement (continued)

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### b) Valuation governance

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UBS's fair value measurement and model governance framework includes numerous controls and other procedural safeguards that are intended to maximize the quality of fair value measurements reported in the financial statements. New products and valuation techniques must be reviewed and approved by key stakeholders from risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value resides with the business divisions. In carrying out their valuation responsibilities, the businesses are required to consider the availability and quality of external market data and to provide justification and rationale for their fair value estimates.

Fair value estimates are validated by risk and finance control functions, which are independent of the business divisions. Independent price verification is performed by Finance through benchmarking the business divisions' fair value estimates with observable market prices and other independent sources. Controls and a governance framework are in place and are intended to ensure the quality of third-party pricing sources where used. For instruments where valuation models are used to determine fair value, independent valuation and model control groups within Finance and Risk Control evaluate UBS's models on a regular basis, including valuation and model input parameters as well as pricing. As a result of the valuation controls employed, valuation adjustments may be made to the business divisions' estimates of fair value to align with independent market data and the relevant accounting standard.

→ **Refer to Note 22d for more information**



## Note 22 Fair value measurement (continued)

### c) Fair value hierarchy

The table below provides the fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value. The narrative that follows describes the different product types, valuation techniques used in measuring their fair value,

including significant valuation inputs and assumptions used, and the factors determining their classification within the fair value hierarchy.

#### Determination of fair values from quoted market prices or valuation techniques<sup>1</sup>

CHF million	31.12.17				31.12.16			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value on a recurring basis</b>								
Financial assets held for trading <sup>2</sup>	108,962	15,211	1,972	126,144	76,044	14,292	1,689	92,025
<i>of which:</i>								
Government bills / bonds	11,935	918	0	12,854	10,500	1,319	0	11,820
Corporate and municipal bonds	37	7,974	552	8,563	58	6,638	591	7,287
Loans	0	3,346	501	3,847	0	1,356	681	2,037
Investment fund units	7,223	1,839	571	9,632	6,114	3,521	63	9,698
Asset-backed securities	0	194	174	368	0	470	215	685
Equity instruments	79,274	186	105	79,565	50,913	397	65	51,375
Financial assets for unit-linked investment contracts	10,492	755	69	11,316	8,459	591	74	9,123
Positive replacement values	458	116,221	1,549	118,227	434	155,428	2,549	158,411
<i>of which:</i>								
Interest rate contracts	1	43,913	135	44,049	8	57,703	278	57,988
Credit derivative contracts	0	2,266	550	2,816	0	2,562	1,313	3,875
Foreign exchange contracts	207	46,748	189	47,143	263	75,607	222	76,092
Equity / index contracts	16	21,541	675	22,232	1	17,274	729	18,003
Commodity contracts	0	1,727	0	1,727	0	2,269	8	2,277
Financial assets designated at fair value	23,032	34,481	1,419	58,933	39,641	23,632	2,079	65,353
<i>of which:</i>								
Government bills / bonds	22,062	3,900	0	25,961	39,439	4,361	0	43,799
Corporate and municipal bonds	765	20,702	0	21,467	15	16,860	0	16,875
Loans (including structured loans)	0	9,385	758	10,143	0	2,043	1,195	3,238
Structured reverse repurchase and securities borrowing agreements	0	118	173	291	0	40	644	684
Other	205	377	489	1,071	187	329	240	756
Financial assets available for sale	3,000	5,157	507	8,665	6,299	8,891	486	15,676
<i>of which:</i>								
Government bills / bonds	2,733	133	0	2,866	5,444	450	0	5,894
Corporate and municipal bonds	121	1,060	9	1,189	646	4,939	12	5,596
Investment fund units	0	70	115	185	0	51	126	177
Asset-backed securities	0	3,880	0	3,880	0	3,381	0	3,381
Equity instruments	146	16	384	546	204	71	336	611
Non-financial assets								
Precious metals and other physical commodities	4,563	0	0	4,563	4,583	0	0	4,583
<b>Assets measured at fair value on a non-recurring basis</b>								
Other assets <sup>3</sup>	0	54	42	95	5,060	131	56	5,248
<b>Total assets measured at fair value</b>	<b>140,015</b>	<b>171,125</b>	<b>5,489</b>	<b>316,629</b>	<b>132,062</b>	<b>202,377</b>	<b>6,860</b>	<b>341,298</b>

## Note 22 Fair value measurement (continued)

### Determination of fair values from quoted market prices or valuation techniques (continued)<sup>1</sup>

CHF million	31.12.17				31.12.16			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Liabilities measured at fair value on a recurring basis</b>								
Trading portfolio liabilities	26,037	4,309	117	30,463	18,807	3,898	119	22,824
<i>of which:</i>								
Government bills / bonds	5,153	256	0	5,409	5,573	648	0	6,221
Corporate and municipal bonds	50	3,453	35	3,538	12	2,927	37	2,976
Investment fund units	541	263	16	820	484	91	20	595
Equity instruments	20,293	336	66	20,695	12,738	227	62	13,026
Negative replacement values	398	112,928	2,807	116,133	539	149,255	4,016	153,810
<i>of which:</i>								
Interest rate contracts	5	38,196	186	38,387	12	51,990	475	52,476
Credit derivative contracts	0	3,196	601	3,797	0	3,269	1,538	4,807
Foreign exchange contracts	213	45,150	122	45,485	274	71,668	148	72,089
Equity / index contracts	42	24,803	1,896	26,741	1	20,254	1,854	22,109
Commodity contracts	0	1,561	1	1,562	0	2,040	1	2,041
Financial liabilities designated at fair value	0	41,376	12,826	54,202	2	44,007	11,008	55,017
<i>of which:</i>								
Issued debt instruments	0	38,617	10,885	49,502	0	40,242	9,688	49,930
Over-the-counter debt instruments	0	2,385	1,930	4,315	2	3,611	1,050	4,663
Structured repurchase agreements	0	372	4	376	0	130	266	395
Loan commitments and guarantees	0	2	7	9	0	25	5	29
Other liabilities – amounts due under unit-linked investment contracts	0	11,523	0	11,523	0	9,286	0	9,286
<b>Liabilities measured at fair value on a non-recurring basis</b>								
Other liabilities <sup>3</sup>	0	1	0	1	0	5,213	0	5,213
<b>Total liabilities measured at fair value</b>	<b>26,435</b>	<b>170,138</b>	<b>15,750</b>	<b>212,323</b>	<b>19,347</b>	<b>211,660</b>	<b>15,143</b>	<b>246,150</b>

<sup>1</sup> Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The fair value of these derivatives was not material for the periods presented. <sup>2</sup> Financial assets held for trading exclude precious metals and other physical commodities. <sup>3</sup> Other assets and other liabilities primarily consist of assets held for sale as well as assets and liabilities of a disposal group held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell.

## Note 22 Fair value measurement (continued)

### Valuation techniques

Valuation techniques are used to value positions for which a market price is not available from market sources. This includes certain less liquid debt and equity instruments, certain exchange-traded derivatives and all derivatives transacted in the OTC market. UBS uses widely recognized valuation techniques for determining the fair value of financial and non-financial instruments that are not actively traded and quoted. The most frequently applied valuation techniques include discounted value of expected cash flows, relative value and option pricing methodologies.

Discounted value of expected cash flows is a valuation technique that measures fair value using estimated expected future cash flows from assets or liabilities and then discounts these cash flows using a discount rate or discount margin that reflects the credit and / or funding spreads required by the market for instruments with similar risk and liquidity profiles to produce a present value. When using such valuation techniques, expected future cash flows are estimated using an observed or implied market price for the future cash flows or by using industry standard cash flow projection models. The discount factors within the calculation are generated using industry standard yield curve modeling techniques and models.

Relative value models measure fair value based on the market prices of equivalent or comparable assets or liabilities, making adjustments for differences between the characteristics of the observed instrument and the instrument being valued.

Option pricing models incorporate assumptions regarding the behavior of future price movements of an underlying referenced asset or assets to generate a probability-weighted future expected payoff for the option. The resulting probability-weighted expected payoff is then discounted using discount factors generated from industry standard yield curve modeling techniques and models. The option pricing model may be implemented using a closed-form analytical formula or other mathematical techniques (e.g., binomial tree or Monte Carlo simulation).

Where available, valuation techniques use market-observable assumptions and inputs. If such data is not available, inputs may be derived by reference to similar assets in active markets, from recent prices for comparable transactions or from other observable market data. In such cases, the inputs selected are based on historical experience and practice for similar or analogous instruments, derivation of input levels based on similar products with observable price levels and knowledge of current market conditions and valuation approaches.

For more complex instruments and instruments not traded in an active market, fair values may be estimated using a combination of observed transaction prices, consensus pricing services and relevant quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices

provided by consensus pricing services. UBS also uses internally developed models, which are typically based on valuation methods and techniques recognized as standard within the industry.

Assumptions and inputs used in valuation techniques include benchmark interest rate curves, credit and funding spreads used in estimating discount rates, bond and equity prices, equity index prices, foreign exchange rates, levels of market volatility and correlation. Refer to Note 22f for more information. The discount curves used by the Group incorporate the funding and credit characteristics of the instruments to which they are applied.

### Financial instruments excluding derivatives: product description, valuation and classification in the fair value hierarchy

#### Government bills and bonds

Product description: government bills and bonds include fixed-rate, floating-rate and inflation-linked bills and bonds issued by sovereign governments.

Valuation: these instruments are generally valued using prices obtained directly from the market. Instruments that cannot be priced directly using active-market data are valued using discounted cash flow valuation techniques that incorporate market data for similar government instruments.

Fair value hierarchy: government bills and bonds are generally traded in active markets with prices that can be obtained directly from these markets, resulting in classification as Level 1, while the remaining positions are classified as Level 2.

#### Corporate and municipal bonds

Product description: corporate bonds include senior, junior and subordinated debt issued by corporate entities. Municipal bonds are issued by state and local governments. While most instruments are standard fixed- or floating-rate securities, some may have more complex coupon or embedded option features.

Valuation: corporate and municipal bonds are generally valued using prices obtained directly from the market for the security, or similar securities, adjusted for seniority, maturity and liquidity. When prices are not available, instruments are valued using discounted cash flow valuation techniques incorporating the credit spread of the issuer or similar issuers. For convertible bonds where no directly comparable price is available, issuances may be priced using a convertible bond model.

Fair value hierarchy: corporate and municipal bonds are generally classified as Level 1 or Level 2 depending on the depth of trading activity behind price sources. Level 3 instruments have no suitable pricing information available and also cannot be referenced to other securities issued by the same issuer. Therefore, such instruments are measured based on price levels for similar issuers adjusted for relative tenor and issuer quality.

## Note 22 Fair value measurement (continued)

### Traded loans and loans designated at fair value

Product description: these instruments include fixed-rate loans, corporate loans, recently originated commercial real estate loans and contingent lending transactions.

Valuation: loans are valued directly using market prices that reflect recent transactions or quoted dealer prices where available. Where no market price data is available, loans are valued using relative value benchmarking using pricing derived from debt instruments in comparable entities or different products in the same entity, or by using a credit default swap valuation technique, which requires inputs for credit spreads, credit recovery rates and interest rates. Recently originated commercial real estate loans are measured using a securitization approach based on rating agency guidelines. The valuation of the contingent lending transactions is dependent on actuarial mortality levels and actuarial life insurance policy lapse rates. Mortality and lapse rate assumptions are based on external actuarial estimations for large homogeneous pools, and contingencies are derived from a range relative to the actuarially expected amount.

Fair value hierarchy: instruments with suitably deep and liquid pricing information are classified as Level 2, while any positions requiring the use of valuation techniques, or for which the price sources have insufficient trading depth, are classified as Level 3.

### Investment fund units

Product description: investment fund units are pools of assets, generally equity instruments and bonds, broken down to redeemable units.

Valuation: investment fund units are predominantly exchange-traded, with readily available quoted prices in liquid markets. Where market prices are not available, fair value may be measured using net asset values (NAV), taking into account any restrictions imposed upon redemption.

Fair value hierarchy: listed units are classified as Level 1, provided there is sufficient trading activity to justify active-market classification, while other positions are classified as Level 2. Positions for which NAV is not available or that are not redeemable at the measurement date or shortly thereafter are classified as Level 3.

### Asset-backed securities (ABS)

Product description: ABS include residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), other asset-backed securities (ABS) and collateralized debt obligations (CDO) and are instruments generally issued through the process of securitization of underlying interest-bearing assets.

Valuation: for liquid securities, the valuation process will use trade and price data, updated for movements in market levels between the time of trading and the time of valuation. Less liquid instruments are measured using discounted expected cash

flows incorporating price data for instruments or indices with similar risk profiles. Inputs to discounted expected cash flow techniques include asset prepayment rates, discount margin or discount yields, asset default rates and asset loss on default severity.

Fair value hierarchy: RMBS, CMBS and ABS are generally classified as Level 2. However, if significant inputs are unobservable, or if market or fundamental data is not available, they are classified as Level 3.

### Equity instruments

Product description: equity instruments include stocks and shares, private equity positions and units held in hedge funds.

Valuation: listed equity instruments are generally valued using prices obtained directly from the market. Unlisted equity holdings, including private equity positions, are initially marked at their transaction price and are revalued when reliable evidence of price movement becomes available or when the position is deemed to be impaired. Fair value for units held in hedge funds is measured based on their published NAV, taking into account any restrictions imposed upon redemption.

Fair value hierarchy: the majority of equity securities are actively traded on public stock exchanges where quoted prices are readily and regularly available, resulting in Level 1 classification. Units held in hedge funds are classified as Level 2, except for positions for which published NAV is not available or that are not redeemable at the measurement date or shortly thereafter, in which case such positions are classified as Level 3.

### Financial assets for unit-linked investment contracts

Product description: unit-linked investment contracts allow investors to invest in a pool of assets through issued investment units.

Valuation: the majority of assets are listed on exchanges and fair values are determined using quoted prices.

Fair value hierarchy: most assets are classified as Level 1 if actively traded, or Level 2 if trading is not active. However, instruments for which prices are not readily available are classified as Level 3.

### Structured (reverse) repurchase agreements

Product description: structured (reverse) repurchase agreements are securities purchased under resale agreements and securities sold under repurchase agreements.

Valuation: these instruments are valued using discounted expected cash flow techniques. The discount rate applied is based on funding curves that are specific to the collateral eligibility terms for the contract in question.

Fair value hierarchy: collateral terms for these positions are often not standard and therefore funding spread levels used for valuation purposes cannot be observed in the market. As a result, these positions are classified as Level 2 and Level 3.

## Note 22 Fair value measurement (continued)

### Financial liabilities designated at fair value

Product description: debt instruments, primarily comprised of equity-, rates- and credit-linked issued notes, which are held at fair value under the fair value option. These instruments are tailored specifically to the holder's risk or investment appetite with structured coupons or payoffs.

Valuation: the risk management and the valuation approaches for these instruments are closely aligned with the equivalent derivatives business and the underlying risk, and the valuation techniques used for this component are the same as the relevant valuation techniques described below. For example, equity-linked notes should be referenced to equity / index contracts and credit-linked notes should be referenced to credit derivative contracts.

Fair value hierarchy: observability is closely aligned with the equivalent derivatives business and the underlying risk.

- Refer to Note 18 for more information on financial liabilities designated at fair value
- Refer to Note 22d for more information on own credit adjustments related to financial liabilities designated at fair value

### Amounts due under unit-linked investment contracts

Product description: the financial liability represents the amounts due to unit holders.

Valuation: the fair values of investment contract liabilities are determined by reference to the fair value of the corresponding assets.

Fair value hierarchy: the liabilities themselves are not actively traded, but are mainly referenced to instruments that are actively traded and are therefore classified as Level 2.

### Derivative instruments: product description, valuation and classification in the fair value hierarchy

The curves used for discounting expected cash flows in the valuation of collateralized derivatives reflect the funding terms associated with the relevant collateral arrangement for the instrument being valued. These collateral arrangements differ across counterparties with respect to the eligible currency and interest terms of the collateral. The majority of collateralized derivatives are measured using a discount curve that is based on funding rates derived from overnight interest in the cheapest eligible currency for the respective counterparty collateral agreement.

Uncollateralized and partially collateralized derivatives are discounted using the LIBOR (or equivalent) curve for the currency of the instrument. As described in Note 22d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by CVA, DVA and FVA as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS's own credit risk and funding costs and benefits.

### Interest rate contracts

Product description: interest rate swap contracts include interest rate swaps, basis swaps, cross-currency swaps, inflation swaps and interest rate forwards, often referred to as forward-rate agreements (FRA). Interest rate option contracts include caps and floors, swaptions, swaps with complex payoff profiles and other more complex interest rate options.

Valuation: interest rate swap contracts are valued by estimating future interest cash flows and discounting those cash flows using a rate that reflects the appropriate funding rate for the position being measured. The yield curves used to estimate future index levels and discount rates are generated using market standard yield curve models using interest rates associated with current market activity. The key inputs to the models are interest rate swap rates, FRA rates, short-term interest rate futures prices, basis swap spreads and inflation swap rates. Interest rate option contracts are valued using various market standard option models, using inputs that include interest rate yield curves, inflation curves, volatilities and correlations. The volatility and correlation inputs within the models are implied from market data based on market-observed prices for standard option instruments trading within the market. Option models used to value more exotic products have a number of model parameter inputs that require calibration to enable the exotic model to price standard option instruments to the price levels observed in the market. When the maturity of the interest rate swap or option contract exceeds the term for which standard market quotes are observable for a significant input parameter, the contracts are valued by extrapolation from the last observable point using standard assumptions or by reference to another observable comparable input parameter to represent a suitable proxy for that portion of the term.

Fair value hierarchy: the majority of interest rate swaps are classified as Level 2 as the standard market contracts that form the inputs for yield curve models are generally traded in active and observable markets. Options are generally treated as Level 2 as the calibration process enables the model output to be validated to active-market levels. Models calibrated in this way are then used to revalue the portfolio of both standard options as well as more exotic products. In most cases, there are active and observable markets for the standard market instruments that form the inputs for yield curve models as well as the financial instruments from which volatility and correlation inputs are derived. Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3. Interest rate swap or option contracts are classified as Level 3 when the term exceeds standard market observable quotes.

## Note 22 Fair value measurement (continued)

### Credit derivative contracts

Product description: a credit derivative is a financial instrument that transfers credit risk related to a single underlying entity, a portfolio of underlying entities or a pool of securitized referenced assets. Credit derivative products include credit default swaps (CDS) on single names, indices, bespoke portfolios and securitized products, plus first to default swaps and certain total return swaps (TRS).

Valuation: credit derivative contracts are valued using industry standard models based primarily on market credit spreads, upfront pricing points and implied recovery rates. Where a derivative credit spread is not directly available, it may be derived from the price of the reference cash bond. Correlation is an additional input for certain portfolio credit derivatives. Asset-backed credit derivatives are valued using a similar valuation technique to the underlying security with an adjustment to reflect the funding differences between cash and synthetic form. Inputs include prepayment rates, default rates, loss severity, discount margin / rate.

Fair value hierarchy classification: single entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads, recovery rates and correlations are determined from actively traded observable market data. Where the underlying reference name(s) are not actively traded and the correlation cannot be directly mapped to actively traded tranche instruments, these contracts are classified as Level 3. Asset-backed credit derivatives follow the characteristics of the underlying security and are therefore distributed across Level 2 and Level 3.

### Foreign exchange contracts

Product description: this includes open spot and forward foreign exchange (FX) contracts and OTC FX option contracts. OTC FX option contracts include standard call and put options, options with multiple exercise dates, path-dependent options, options with averaging features, options with discontinuous payoff characteristics, options on a number of underlying FX rates and multi-dimensional FX option contracts, which have a dependency on multiple FX pairs.

Valuation: open spot FX contracts are valued using the FX spot rate observed in the market. Forward FX contracts are valued using the FX spot rate adjusted for forward pricing points observed from standard market-based sources. OTC FX option contracts are valued using market standard option valuation models. The models used for shorter-dated options (i.e., maturities of five years or less) tend to be different than those used for longer-dated options because the models needed for longer-dated OTC FX contracts require additional consideration of interest rate and FX rate interdependency. Inputs to the option valuation models include spot FX rates, FX forward

points, FX volatilities, interest rate yield curves, interest rate volatilities and correlations. The inputs for volatility and correlation are implied through the calibration of observed prices for standard option contracts trading within the market. The valuation for multi-dimensional FX options uses a multi-local volatility model, which is calibrated to the observed FX volatilities for all relevant FX pairs.

Fair value hierarchy: the markets for both FX spot and FX forward pricing points are both actively traded and observable and therefore such FX contracts are generally classified as Level 2. A significant proportion of OTC FX option contracts are classified as Level 2 as inputs are derived mostly from standard market contracts traded in active and observable markets. OTC FX option contracts classified as Level 3 include multi-dimensional FX options and long-dated FX exotic option contracts where there is no active market from which to derive volatility or correlation inputs. The inputs used to value these OTC FX option contracts are calculated using consensus pricing services without an underlying principal market, historical asset prices or by extrapolation.

### Equity / index contracts

Product description: equity / index contracts are equity forward contracts and equity option contracts. Equity option contracts include market standard single or basket stock or index call and put options as well as equity option contracts with more complex features.

Valuation: equity forward contracts have a single stock or index underlying and are valued using market standard models. The key inputs to the models are stock prices, estimated dividend rates and equity funding rates (which are implied from prices of forward contracts observed in the market). Estimated cash flows are then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When no market data is available for the instrument maturity, they are valued by extrapolation of available data, use of historical dividend data, or use of data for a related equity. Equity option contracts are valued using market standard models that estimate the equity forward level as described for equity forward contracts and incorporate inputs for stock volatility and for correlation between stocks within a basket. The probability-weighted expected option payoff generated is then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When volatility, forward or correlation inputs are not available, they are valued using extrapolation of available data, historical dividend, correlation or volatility data, or the equivalent data for a related equity.

## Note 22 Fair value measurement (continued)

Fair value hierarchy: as inputs are derived mostly from standard market contracts traded in active and observable markets, a significant proportion of equity forward contracts are classified as Level 2. Equity option positions for which inputs are derived from standard market contracts traded in active and observable markets are also classified as Level 2. Level 3 positions are those for which volatility, forward or correlation inputs are not observable.

### Commodity contracts

Product description: commodity derivative contracts include forward, swap and option contracts on individual commodities and on commodity indices.

Valuation: commodity forward and swap contracts are measured using market standard models that use market

forward levels on standard instruments. Commodity option contracts are measured using market standard option models that estimate the commodity forward level as described for commodity forward and swap contracts, incorporating inputs for the volatility of the underlying index or commodity. For commodity options on baskets of commodities or bespoke commodity indices, the valuation technique also incorporates inputs for the correlation between different commodities or commodity indices.

Fair value hierarchy: individual commodity contracts are typically classified as Level 2 because active forward and volatility market data is available.

→ Refer to Note 12 for more information on derivative instruments

### d) Valuation adjustments

The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. As a result, valuations are adjusted, where appropriate and when such factors would be considered by market participants in estimating fair value, to reflect close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors. Valuation adjustments are an important component of fair value for assets and liabilities that are measured using valuation techniques. Such adjustments are applied to reflect uncertainties within the fair value measurement process, to adjust for an identified model simplification or to incorporate an aspect of fair value that requires an overall portfolio assessment rather than an evaluation based on an individual instrument level characteristic.

### Day-1 reserves

For new transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially

recognized at the transaction price. The transaction price may differ from the fair value obtained using a valuation technique, where any such difference is deferred and not initially recognized in the income statement. These day-1 profit or loss reserves are reflected, where appropriate, as valuation adjustments.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss related to financial instruments other than financial assets available for sale is released into *Net trading income* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss related to financial assets available for sale is released into *Other comprehensive income* when pricing of equivalent products or the underlying parameters become observable and is released into *Other income* when the assets are sold.

### Deferred day-1 profit or loss

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Balance at the beginning of the year</b>	<b>371</b>	421	480
Profit / (loss) deferred on new transactions	<b>242</b>	254	268
(Profit) / loss recognized in the income statement	<b>(274)</b>	(290)	(321)
(Profit) / loss recognized in other comprehensive income		(23)	
Foreign currency translation	<b>(10)</b>	9	(6)
<b>Balance at the end of the year</b>	<b>329</b>	371	421

## Note 22 Fair value measurement (continued)

### Own credit

In addition to considering the valuation of the derivative risk component, the valuation of financial liabilities designated at fair value also requires consideration of the funded component and specifically the own credit component of fair value. Own credit risk is reflected in the valuation of UBS's fair value option liabilities where this component is considered relevant for valuation purposes by UBS's counterparties and other market participants. However, own credit risk is not reflected in the valuation of UBS's liabilities that are fully collateralized or for other obligations for which it is established market practice not to include an own credit component.

The own credit presentation requirements of IFRS 9, *Financial Instruments*, were adopted as of 1 January 2016. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit have been recognized in *Other comprehensive income* directly within *Retained earnings*. As the Group does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own

credit recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Comparative period information was not restated.

Own credit is estimated using an own credit adjustment (OCA) curve, which incorporates observable market data, including market-observed secondary prices for UBS senior debt, UBS credit default swap (CDS) spreads and senior debt curves of peers. The table below summarizes the effects of own credit adjustments related to financial liabilities designated at fair value. The change in unrealized own credit for the period ended consists of changes in fair value that are attributable to the change in UBS's credit spreads, as well as the effect of changes in fair values attributable to factors other than credit spreads, such as redemptions, effects from time decay and changes in interest and other market rates. Realized own credit is recognized when an instrument with an associated unrealized own credit adjustment is repurchased prior to the contractual maturity date. Life-to-date amounts reflect the cumulative unrealized change since initial recognition.

→ Refer to Note 18 for more information on financial liabilities designated at fair value

### Own credit adjustments on financial liabilities designated at fair value

	For the year ended		
	Included in Other comprehensive income	31.12.16	Included in Net trading income 31.12.15
<i>CHF million</i>	<b>31.12.17</b>		
<b>Recognized during the year:</b>			
Realized gain / (loss)	<b>21</b>	18	
Unrealized gain / (loss)	<b>(333)</b>	(138)	553
Total gain / (loss), before tax	<b>(312)</b>	(120)	
		As of	
<i>CHF million</i>	<b>31.12.17</b>	31.12.16	31.12.15
<b>Recognized on the balance sheet as of the end of the year:</b>			
Unrealized life-to-date gain / (loss)	<b>(195)</b>	141	287



## Note 22 Fair value measurement (continued)

### Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments that are classified as *Financial assets designated at fair value*, credit valuation adjustments (CVA) are necessary to reflect the credit risk of the counterparty inherent in these instruments. This amount represents the estimated fair value of protection required to hedge the counterparty credit risk of such instruments. A CVA is determined for each counterparty, considering all exposures to that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses and other contractual factors.

### Funding valuation adjustments

Funding valuation adjustments (FVA) reflect the costs and benefits of funding associated with uncollateralized and partially collateralized derivative receivables and payables and are calculated as the valuation effect from moving the discounting of the uncollateralized derivative cash flows from LIBOR to OCA using the CVA framework.

An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or repledged.

### Debit valuation adjustments

A debit valuation adjustment (DVA) is estimated to incorporate own credit in the valuation of derivatives, effectively consistent with the CVA framework. DVA is determined for each

counterparty, considering all exposures with that counterparty and taking into account collateral netting agreements, expected future mark-to-market movements and UBS's credit default spreads.

### Other valuation adjustments

Instruments that are measured as part of a portfolio of combined long and short positions are valued at mid-market levels to ensure consistent valuation of the long- and short-component risks. A liquidity valuation adjustment is then made to the overall net long or short exposure to move the fair value to bid or offer as appropriate, reflecting current levels of market liquidity. The bid-offer spreads used in the calculation of this valuation adjustment are obtained from market transactions and other relevant sources and are updated periodically.

Uncertainties associated with the use of model-based valuations are incorporated into the measurement of fair value through the use of model reserves. These reserves reflect the amounts that the Group estimates should be deducted from valuations produced directly by models to incorporate uncertainties in the relevant modeling assumptions, in the model and market inputs used, or in the calibration of the model output to adjust for known model deficiencies. In arriving at these estimates, the Group considers a range of market practices, including how it believes market participants would assess these uncertainties. Model reserves are reassessed periodically in light of data from market transactions, consensus pricing services and other relevant sources.

### Valuation adjustments on financial instruments

	As of	
<i>Life-to-date gain / (loss), CHF million</i>	<b>31.12.17</b>	31.12.16
<b>Credit valuation adjustments<sup>1</sup></b>	<b>(113)</b>	(216)
<b>Funding valuation adjustments</b>	<b>(49)</b>	(106)
<b>Debit valuation adjustments</b>	<b>2</b>	5
<b>Other valuation adjustments</b>	<b>(715)</b>	(713)
<i>of which: liquidity</i>	<b>(465)</b>	(439)
<i>of which: model uncertainty</i>	<b>(250)</b>	(274)

<sup>1</sup> Amounts do not include reserves against defaulted counterparties.

### e) Transfers between Level 1 and Level 2

The amounts provided below reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets totaling approximately CHF 0.8 billion, which were mainly comprised of financial assets designated at fair value, largely corporate and municipal bonds, and financial assets held for trading, predominantly investment fund units as well as corporate and municipal bonds, were transferred from Level 2 to Level 1 during 2017, generally due to increased levels of trading activity observed within the market. Transfers of financial

liabilities from Level 2 to Level 1 during 2017 were not significant.

Assets totaling approximately CHF 0.3 billion, which were mainly comprised of financial assets available for sale, largely government bonds, and financial assets held for trading, predominantly investment fund units and equity instruments, were transferred from Level 1 to Level 2 during 2017, generally due to diminished levels of trading activity observed within the market. Transfers of financial liabilities from Level 1 to Level 2 during 2017 were not significant.

## Note 22 Fair value measurement (continued)

### f) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities together with the valuation techniques used to measure fair value, the significant inputs used in the valuation technique that are considered unobservable and a range of values for those unobservable inputs. Several inputs disclosed in prior periods are not disclosed in the table below because they are not considered significant to the respective valuation technique as of 31 December 2017.

The range of values represents the highest- and lowest-level input used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input, but rather the different underlying characteristics of the relevant assets and liabilities. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Further, the ranges of unobservable inputs may differ across other financial institutions due to the diversity of the products in each firm's inventory.

#### Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) <sup>1</sup>	Range of inputs						
	Assets		Liabilities				31.12.17			31.12.16			unit <sup>1</sup>
	31.12.17	31.12.16	31.12.17	31.12.16			low	high	weighted average <sup>2</sup>	low	high	weighted average <sup>2</sup>	
<b>Financial assets held for trading / Trading portfolio liabilities, Financial assets / liabilities designated at fair value and Financial assets available for sale</b>													
Corporate and municipal bonds	0.6	0.6	0.0	0.0	Relative value to market comparable	Bond price equivalent	0	133	92	0	128	88	points
Traded loans, loans designated at fair value, loan commitments and guarantees	1.7	2.0	0.0	0.0	Relative value to market comparable	Loan price equivalent	50	102	98	39	103	94	points
					Discounted expected cash flows	Credit spread	23	124		71	554		basis points
					Market comparable and securitization model	Discount margin	0	14	2	0	16	2	%
Investment fund units <sup>3</sup>	0.7	0.2	0.0	0.0	Relative value to market comparable	Net asset value							
Equity instruments <sup>3</sup>	0.5	0.4	0.1	0.1	Relative value to market comparable	Price							
Structured (reverse) repurchase agreements	0.2	0.6	0.0	0.3	Discounted expected cash flows	Funding spread	15	195		15	195		basis points
Issued and over-the-counter debt instruments <sup>4</sup>			12.8	10.7									
<b>Replacement values</b>													
Interest rate contracts	0.1	0.3	0.2	0.5	Option model	Volatility of interest rates	26	229		26	176		%
Credit derivative contracts	0.5	1.3	0.6	1.5	Discounted expected cash flows	Credit spreads	6	550		0	791		basis points
						Bond price equivalent	2	102		3	100		points
Equity / index contracts	0.7	0.7	1.9	1.9	Option model	Equity dividend yields	0	13		0	15		%
						Volatility of equity stocks, equity and other indices	0	172		0	150		%
						Equity-to-FX correlation	(39)	70		(45)	82		%
						Equity-to-equity correlation	(50)	97		12	98		%

<sup>1</sup> The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par (e.g., 100 points would be 100% of par). <sup>2</sup> Weighted averages are provided for non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to derivative contracts as this would not be meaningful. <sup>3</sup> The range of inputs is not disclosed due to the dispersion of values given the diverse nature of the investments. <sup>4</sup> Valuation techniques, significant unobservable inputs and the respective input ranges for issued debt instruments and over-the-counter debt instruments are the same as the equivalent derivative or structured financing instruments presented elsewhere in this table.

## Note 22 Fair value measurement (continued)

### Significant unobservable inputs in Level 3 positions

This section discusses the significant unobservable inputs used in the valuation of Level 3 instruments and assesses the potential effect that a change in each unobservable input in isolation may have on a fair value measurement, including information to facilitate an understanding of factors that give rise to the input ranges shown. Relationships between observable and unobservable inputs have not been included in the summary below.

#### Bond price equivalent

Where market prices are not available for a bond, fair value is measured by comparison with observable pricing data from similar instruments. Factors considered when selecting comparable instruments include credit quality, maturity and industry of the issuer. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield (either as an outright yield or as a spread to LIBOR). Bond prices are expressed as points of the nominal, where 100 represents a fair value equal to the nominal value (i.e., par).

For corporate and municipal bonds, the range represents the range of prices from reference issuances used in determining fair value. Bonds priced at 0 are distressed to the point that no recovery is expected, while prices significantly in excess of 100 or par relate to inflation-linked or structured issuances that pay a coupon in excess of the market benchmark as of the measurement date.

For credit derivatives, the bond price range represents the range of prices used for reference instruments that are typically converted to an equivalent yield or credit spread as part of the valuation process.

#### Loan price equivalent

Where market prices are not available for a traded loan, fair value is measured by comparison with observable pricing data for similar instruments. Factors considered when selecting comparable instruments include industry segment, collateral quality, maturity and issuer-specific covenants. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield. The range represents the range of prices derived from reference issuances of a similar credit quality used in measuring fair value for loans classified as Level 3. Loans priced at 0 are distressed to the point that no recovery is expected, while a current price of 100 represents a loan that is expected to be repaid in full.

#### Credit spread

Valuation models for many credit derivatives require an input for the credit spread, which is a reflection of the credit quality of the associated referenced underlying. The credit spread of a particular security is quoted in relation to the yield on a benchmark security or reference rate, typically either US Treasury or LIBOR, and is generally expressed in terms of basis points. An increase / (decrease) in credit spread will increase / (decrease) the value of credit protection offered by CDS and other credit derivative products. The income statement effect from such changes depends on the nature and direction of the positions held. Credit spreads may be negative where the asset is more creditworthy than the benchmark against which the spread is calculated. A wider credit spread represents decreasing creditworthiness. The range represents a diverse set of underlyings, with the lower end of the range representing credits of the highest quality (e.g., approximating the risk of LIBOR) and the upper end of the range representing greater levels of credit risk.

#### Discount margin (DM)

The DM spread represents the discount rates used to present value cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. DM spreads are a rate or rates applied on top of a floating index (e.g., LIBOR) to discount expected cash flows. Generally, a decrease / (increase) in the DM in isolation would result in a higher / (lower) fair value.

The high end of the range relates to securities that are priced low within the market relative to the expected cash flow schedule. This indicates that the market is pricing an increased risk of credit loss into the security that is greater than what is being captured by the expected cash flow generation process. The low ends of the ranges are typical of funding rates on better-quality instruments.

#### Funding spread

Structured financing transactions are valued using synthetic funding curves that best represent the assets that are pledged as collateral for the transactions. They are not representative of where UBS can fund itself on an unsecured basis, but provide an estimate of where UBS can source and deploy secured funding with counterparties for a given type of collateral. The funding spreads are expressed in terms of basis points over or under LIBOR, and if funding spreads widen, this increases the effect of discounting.

A small proportion of structured debt instruments and non-structured fixed-rate bonds within financial liabilities designated at fair value had an exposure to funding spreads that was longer in duration than the actively traded market.

## Note 22 Fair value measurement (continued)

### Volatility

Volatility measures the variability of future prices for a particular instrument and is generally expressed as a percentage, where a higher number reflects a more volatile instrument for which future price movements are more likely to occur. The minimum level of volatility is 0% and there is no theoretical maximum. Volatility is a key input into option models, where it is used to derive a probability-based distribution of future prices for the underlying instrument. The effect of volatility on individual positions within the portfolio is driven primarily by whether the option contract is a long or short position. In most cases, the fair value of an option increases as a result of an increase in volatility and is reduced by a decrease in volatility. Generally, volatility used in the measurement of fair value is derived from active-market option prices (referred to as implied volatility). A key feature of implied volatility is the volatility "smile" or "skew," which represents the effect of pricing options of different option strikes at different implied volatility levels.

The volatility of interest rates reflects the range of unobservable volatilities across different currencies and related underlying interest rate levels. Volatilities of low interest rates tend to be much higher than volatilities of high interest rates. In addition, different currencies may have significantly different implied volatilities. The volatility of equity stocks, equity and other indices reflects the range of underlying stock volatilities.

### Correlation

Correlation measures the inter relationship between the movements of two variables. It is expressed as a percentage between -100% and +100%, where +100% represents perfectly correlated variables (meaning a movement of one variable is associated with a movement of the other variable in

the same direction), and -100% implies the variables are inversely correlated (meaning a movement of one variable is associated with a movement of the other variable in the opposite direction). The effect of correlation on the measurement of fair value depends on the specific terms of the instruments being valued, due to the range of different payoff features within such instruments.

Equity-to-FX correlation is important for equity options based on a currency different than the currency of the underlying stock. Equity-to-equity correlation is particularly important for complex options that incorporate, in some manner, different equities in the projected payoff. The closer the correlation is to 100%, the more related one equity is to another. For example, equities with a very high correlation could be from different parts of the same corporate structure.

### Equity dividend yields

The derivation of a forward price for an individual stock or index is important for measuring fair value for forward or swap contracts and for measuring fair value using option pricing models. The relationship between the current stock price and the forward price is based on a combination of expected future dividend levels and payment timings, and, to a lesser extent, the relevant funding rates applicable to the stock in question. Dividend yields are generally expressed as an annualized percentage of the share price with the lowest limit of 0% representing a stock that is not expected to pay any dividend. The dividend yield and timing represents the most significant parameter in determining fair value for instruments that are sensitive to an equity forward price.

## g) Level 3 instruments: sensitivity to changes in unobservable input assumptions

The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, and the estimated effect thereof.

The table shown presents the favorable and unfavorable effects for each class of financial assets and liabilities for which the potential change in fair value is considered significant. The sensitivity data presented represent an estimation of valuation uncertainty based on reasonably possible alternative values for Level 3 inputs at the balance sheet date and do not represent the estimated effect of stress scenarios. Typically, these financial assets and liabilities are sensitive to a combination of inputs from Levels 1–3. Although well-defined interdependencies may exist

between Levels 1–2 and Level 3 parameters (e.g., between interest rates, which are generally Level 1 or Level 2, and prepayments, which are generally Level 3), these have not been incorporated in the table. Further, direct inter relationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data are estimated using a number of techniques, including the estimation of price dispersion among different market participants, variation in modeling approaches and reasonably possible changes to assumptions used within the fair value measurement process. The sensitivity ranges are not always symmetrical around the fair values as the inputs used in valuations are not always precisely in the middle of the favorable and unfavorable range.

## Note 22 Fair value measurement (continued)

Sensitivity data are determined at a product or parameter level and then aggregated assuming no diversification benefit. The calculated sensitivity is applied to both the outright position and any related Level 3 hedge. The main interdependencies across different Level 3 products to a single unobservable input parameter have been included in the basis of netting exposures within the calculation. Aggregation without allowing for diversification involves the simple summation of individual results with the total sensitivity, therefore representing the effect of all

unobservable inputs that, if moved to a reasonably possible favorable or unfavorable level at the same time, would result in a significant change in the valuation. Diversification would incorporate estimated correlations across different sensitivity results and, as such, would result in an overall sensitivity that would be less than the sum of the individual component sensitivities. The Group believes that, while there are diversification benefits within the portfolios representing these sensitivity numbers, they are not significant to this analysis.

### Sensitivity of fair value measurements to changes in unobservable input assumptions<sup>1</sup>

CHF million	31.12.17		31.12.16	
	Favorable changes <sup>2</sup>	Unfavorable changes <sup>2</sup>	Favorable changes <sup>2</sup>	Unfavorable changes <sup>2</sup>
Traded loans, loans designated at fair value, loan commitments and guarantees	79	(11)	80	(8)
Asset-backed securities	19	(15)	23	(29)
Equity instruments	79	(53)	85	(66)
Interest rate derivative contracts, net	13	(26)	30	(30)
Credit derivative contracts, net	64	(99)	128	(174)
Foreign exchange derivative contracts, net	12	(6)	18	(9)
Equity / index derivative contracts, net	190	(193)	142	(143)
Structured (reverse) repurchase agreements	34	(34)	43	(46)
Other	13	(13)	12	(12)
<b>Total</b>	<b>502</b>	<b>(450)</b>	<b>560</b>	<b>(517)</b>

<sup>1</sup> Effective 31 December 2017, the sensitivity of issued and over-the-counter debt instruments is reported with the equivalent derivative or structured financing instrument. Prior-period information has been restated to reflect this change in presentation. <sup>2</sup> Of the total favorable changes, CHF 78 million as of 31 December 2017 (31 December 2016: CHF 75 million) related to financial assets available for sale. Of the total unfavorable changes, CHF 51 million as of 31 December 2017 (31 December 2016: CHF 55 million) related to financial assets available for sale.

### h) Level 3 instruments: movements during the period

#### Significant changes in Level 3 instruments

The table on the following pages presents additional information about Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy and, as a result, realized and unrealized gains and losses included in the table may not include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented within the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters.

Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

Assets transferred into and out of Level 3 totaled CHF 1.4 billion and CHF 1.1 billion, respectively. Transfers into Level 3 were primarily comprised of investment fund units and equity /

index contracts, due to decreased observability of the respective net asset value and equity volatility inputs. Transfers out of Level 3 were primarily comprised of credit derivative and equity / index contracts, reflecting increased observability of the respective credit spread and equity volatility inputs.

Liabilities transferred into and out of Level 3 totaled CHF 1.8 billion and CHF 3.2 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments and equity / index contracts, due to decreased observability of the respective equity volatility inputs used to determine the fair value of the options embedded in these structures. Transfers out of Level 3 were primarily comprised of equity-linked issued debt instruments and credit derivative contracts resulting from changes in the availability of the observable equity volatility and credit spread inputs used to determine the fair value of the options embedded in these structures.

## Note 22 Fair value measurement (continued)

### Movements of Level 3 instruments

CHF billion	Balance as of 31 December 2015	Total gains / (losses) included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation
		Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>								
<b>Financial assets held for trading</b>	<b>2.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.9</b>	<b>(6.8)</b>	<b>4.1</b>	<b>0.0</b>	<b>1.7</b>	<b>(0.3)</b>	<b>(0.1)</b>	
<i>of which:</i>											
Corporate and municipal bonds	0.7	0.2	0.1	0.6	(0.8)	0.0	0.0	0.1	(0.1)	(0.1)	
Loans	0.8	(0.1)	(0.1)	0.1	(5.2)	4.1	0.0	1.1	(0.2)	0.0	
Other	0.6	0.0	0.0	0.2	(0.8)	0.0	0.0	0.5	0.0	0.0	
<b>Financial assets designated at fair value</b>	<b>3.3</b>	<b>(0.4)</b>	<b>(0.1)</b>	<b>0.1</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.9)</b>	<b>0.5</b>	<b>(0.1)</b>	<b>0.0</b>	
<i>of which:</i>											
Loans (including structured loans)	1.7	(0.4)	(0.1)	0.0	0.0	0.6	(1.0)	0.4	(0.1)	0.0	
Structured reverse repurchase and securities borrowing agreements	1.5	0.0	0.0	0.0	0.0	0.0	(0.9)	0.0	0.0	0.0	
Other	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Financial assets available for sale</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.0</b>	
<b>Positive replacement values</b>	<b>2.9</b>	<b>(0.4)</b>	<b>(0.5)</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>(1.9)</b>	<b>1.3</b>	<b>(0.4)</b>	<b>0.0</b>	
<i>of which:</i>											
Credit derivative contracts	1.3	(0.2)	(0.1)	0.0	0.0	0.6	(0.7)	0.4	(0.1)	0.0	
Equity / index contracts	1.0	(0.1)	0.0	0.0	0.0	0.4	(0.6)	0.2	(0.2)	0.0	
Other	0.6	(0.1)	(0.3)	0.0	0.0	0.1	(0.6)	0.7	(0.1)	0.0	
<b>Negative replacement values</b>	<b>3.3</b>	<b>0.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>1.5</b>	<b>(2.1)</b>	<b>1.2</b>	<b>(0.6)</b>	<b>0.0</b>	
<i>of which:</i>											
Credit derivative contracts	1.3	0.5	0.6	0.0	0.0	0.2	(0.7)	0.3	(0.1)	0.0	
Equity / index contracts	1.4	0.3	0.1	0.0	0.0	1.0	(0.8)	0.2	(0.3)	0.0	
Other	0.6	(0.2)	(0.2)	0.0	0.0	0.3	(0.6)	0.7	(0.2)	0.0	
<b>Financial liabilities designated at fair value</b>	<b>10.7</b>	<b>1.0</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>5.0</b>	<b>(3.5)</b>	<b>0.9</b>	<b>(2.9)</b>	<b>(0.1)</b>	
<i>of which:</i>											
Issued debt instruments	9.3	0.9	0.6	0.0	0.0	4.1	(2.5)	0.8	(2.9)	(0.1)	
Over-the-counter debt instruments	0.8	0.1	0.0	0.0	0.0	0.8	(0.6)	0.1	0.0	0.0	
Structured repurchase agreements	0.6	0.0	0.0	0.0	0.0	0.1	(0.4)	0.0	0.0	0.0	

<sup>1</sup> Total Level 3 assets as of 31 December 2017 were CHF 5.5 billion (31 December 2016: CHF 6.9 billion). Total Level 3 liabilities as of 31 December 2017 were CHF 15.7 billion (31 December 2016: CHF 15.1 billion).

Balance as of 31 December 2016	Total gains / (losses) included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 December 2017 <sup>1</sup>
	Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>									
<b>1.7</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.7</b>	<b>(3.8)</b>	<b>2.7</b>	<b>0.0</b>	<b>0.9</b>	<b>(0.2)</b>	<b>0.0</b>	<b>2.0</b>	
0.6	0.1	0.1	0.4	(0.7)	0.0	0.0	0.1	0.0	0.0	0.6	
0.7	0.0	(0.1)	0.1	(2.8)	2.7	0.0	0.0	(0.1)	0.0	0.5	
0.4	(0.1)	0.0	0.2	(0.3)	0.0	0.0	0.8	0.0	0.0	0.9	
<b>2.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>(1.2)</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>1.4</b>	
1.2	0.2	0.2	0.0	0.0	0.1	(0.6)	0.0	(0.1)	0.0	0.8	
0.6	0.0	0.0	0.0	0.0	0.1	(0.6)	0.0	0.0	0.0	0.2	
0.2	(0.1)	(0.1)	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.5	
<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>	
<b>2.5</b>	<b>(0.3)</b>	<b>(0.4)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>(1.2)</b>	<b>0.4</b>	<b>(0.8)</b>	<b>0.0</b>	<b>1.5</b>	
1.3	(0.2)	(0.2)	0.0	0.0	0.0	(0.3)	0.0	(0.4)	0.0	0.5	
0.7	(0.1)	(0.1)	0.0	0.0	0.9	(0.7)	0.3	(0.4)	0.0	0.7	
0.5	0.0	(0.1)	0.0	0.0	0.0	(0.2)	0.1	(0.1)	0.0	0.3	
<b>4.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.4)</b>	<b>0.5</b>	<b>(1.3)</b>	<b>0.1</b>	<b>2.8</b>	
1.5	0.0	(0.2)	0.0	0.0	0.1	(0.4)	0.2	(0.8)	0.0	0.6	
1.9	0.3	0.2	0.0	0.0	0.6	(0.6)	0.2	(0.5)	0.0	1.9	
0.6	0.0	0.0	0.0	0.0	0.0	(0.4)	0.1	(0.1)	0.0	0.3	
<b>11.0</b>	<b>1.4</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>6.7</b>	<b>(5.7)</b>	<b>1.3</b>	<b>(1.8)</b>	<b>(0.1)</b>	<b>12.8</b>	
9.7	1.4	0.9	0.0	0.0	5.2	(4.9)	1.2	(1.6)	(0.1)	10.9	
1.1	0.0	0.0	0.0	0.0	1.5	(0.7)	0.1	0.0	0.0	1.9	
0.3	0.0	0.0	0.0	0.0	0.0	(0.1)	0.0	(0.2)	0.0	0.0	

## Note 22 Fair value measurement (continued)

### i) Financial instruments not measured at fair value

The table below provides the estimated fair values of financial instruments not measured at fair value.

#### Financial instruments not measured at fair value

CHF billion	31.12.17					31.12.16				
	Carrying value	Fair value				Carrying value	Fair value			
		Total	Total	Level 1	Level 2		Level 3	Total	Total	Level 1
<b>Assets</b>										
Cash and balances with central banks	87.8	87.8	87.8	0.0	0.0	107.8	107.8	107.8	0.0	0.0
Due from banks	13.7	13.7	13.1	0.6	0.0	13.2	13.2	12.5	0.7	0.0
Cash collateral on securities borrowed	12.4	12.4	0.0	12.4	0.0	15.1	15.1	0.0	15.1	0.0
Reverse repurchase agreements	77.2	77.2	0.0	74.8	2.5	66.2	66.2	0.0	62.5	3.7
Cash collateral receivables on derivative instruments	23.4	23.4	0.0	23.4	0.0	26.7	26.7	0.0	26.7	0.0
Loans	319.6	321.0	0.0	176.7	144.3	306.3	309.7	0.0	169.3	140.4
Financial assets held to maturity	9.2	9.0	6.3	2.7	0.0	9.3	9.1	6.3	2.8	0.0
Other assets	27.9	27.9	0.0	27.9	0.0	18.5	18.5	0.0	18.5	0.0
<b>Liabilities</b>										
Due to banks	7.5	7.5	6.5	1.1	0.0	10.6	10.6	8.8	1.9	0.0
Cash collateral on securities lent	1.8	1.8	0.0	1.8	0.0	2.8	2.8	0.0	2.8	0.0
Repurchase agreements	15.3	15.3	0.0	15.3	0.0	6.6	6.6	0.0	6.6	0.0
Cash collateral payables on derivative instruments	30.2	30.2	0.0	30.2	0.0	35.5	35.5	0.0	35.5	0.0
Due to customers	409.0	409.0	0.0	409.0	0.0	423.7	423.7	0.0	423.7	0.0
Debt issued	139.6	143.5	0.0	139.1	4.3	103.7	106.1	0.0	103.5	2.6
Other liabilities	36.3	36.3	0.0	36.3	0.0	38.3	38.4	0.0	38.4	0.0

The fair values included in the table above were calculated for disclosure purposes only. The valuation techniques and assumptions described below relate only to the fair value of UBS's financial instruments not measured at fair value. Other institutions may use different methods and assumptions for their fair value estimation, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another. The following principles were applied when determining fair value estimates for financial instruments not measured at fair value:

- For financial instruments with remaining maturities greater than three months, the fair value was determined from quoted market prices, if available.
- Where quoted market prices were not available, the fair values were estimated by discounting contractual cash flows using current market interest rates or appropriate yield curves for instruments with similar credit risk and maturity. These estimates generally include adjustments for counterparty credit risk or UBS's own credit.
- For short-term financial instruments with remaining maturities of three months or less, the carrying amount, which is net of

credit loss allowances, is generally considered a reasonable estimate of fair value. The following financial instruments not measured at fair value had remaining maturities of three months or less as of 31 December 2017: 100% of cash and balances with central banks, 95% of amounts due from banks, 100% of cash collateral on securities borrowed, 81% of reverse repurchase agreements, 100% of cash collateral receivables on derivative instruments, 51% of loans, 0% of financial assets held to maturity, 86% of amounts due to banks, 100% of cash collateral on securities lent, 96% of repurchase agreements, 100% of cash collateral payables on derivative instruments, 99% of amounts due to customers and 13% of debt issued.

- The fair value estimates for repurchase and reverse repurchase agreements with variable and fixed interest rates, for all maturities, include the valuation of the interest rate component of these instruments. Credit and debit valuation adjustments have not been included in the valuation due to the short-term nature of these instruments.



## Note 23 Restricted and transferred financial assets

This Note provides information on restricted financial assets (Note 23a), transfers of financial assets (Note 23b and 23c) and financial assets that are received as collateral with the right to resell or repledge these assets (Note 23d).

### a) Restricted financial assets

Restricted financial assets consist of assets pledged as collateral against an existing liability or contingent liability and other assets that are otherwise explicitly restricted such that they cannot be used to secure funding.

Financial assets are mainly pledged as collateral in securities lending transactions, in repurchase transactions, against loans from Swiss mortgage institutions and in connection with the issuance of covered bonds. The Group generally enters into repurchase and securities lending arrangements under standard market agreements. For securities lending, the cash received as collateral may be more or less than the fair value of the securities loaned, depending on the nature of the transaction. For repurchase agreements, the fair value of the collateral sold under an agreement to repurchase is generally in excess of the cash borrowed. Pledged mortgage loans serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances of CHF 12,457 million as of 31 December 2017 (31 December 2016: CHF 14,137 million).

Other restricted financial assets include assets protected under client asset segregation rules, assets held by the Group's insurance entities to back related liabilities to the policy holders, assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities such as certain investment funds and other structured entities. The carrying value of the liabilities associated with these other restricted financial assets is generally equal to the carrying value of the

assets, with the exception of assets held to comply with local asset maintenance requirements, for which the associated liabilities are greater.

UBS Group AG and its subsidiaries are, in certain cases, subject to regulatory requirements that affect the transfer of dividends and capital within the Group. Certain regulated subsidiaries are required to maintain capital and / or liquidity to comply with local regulations and may be subject to prudential limitations by regulators that limit the amount of funds that they can distribute or otherwise transfer. Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries. Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis, such as the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) process that affects UBS Americas Holding LLC, and may limit the ability of the entity to engage in new activities or take capital actions based on the results of those tests. Non-regulated subsidiaries are generally not subject to such requirements and transfer restrictions. However, restrictions can also be the result of different legal, regulatory, contractual, entity- or country-specific arrangements and / or requirements.

→ Refer to "Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups" in the "Significant regulated subsidiary and sub-group information" section of this report for financial information on significant regulated subsidiaries of the group

Restricted financial assets	31.12.17	31.12.16
<i>CHF million</i>		
<b>Financial assets pledged as collateral</b>		
Trading portfolio assets	46,219	36,549
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	35,363	30,260
Loans <sup>1</sup>	17,631	19,887
Financial assets designated at fair value	170	776
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	170	636
<b>Total financial assets pledged as collateral<sup>2</sup></b>	<b>64,020</b>	<b>57,213</b>
<b>Other restricted financial assets</b>		
Due from banks	3,280	2,625
Reverse repurchase agreements	0	658
Trading portfolio assets	12,273	12,129
Cash collateral receivables on derivative instruments	3,822	4,329
Loans	1,256	958
Financial assets designated at fair value	2,602	328
Financial assets available for sale	246	247
Other	95	5,195
<b>Total other restricted financial assets</b>	<b>23,573</b>	<b>26,470</b>
<b>Total financial assets pledged and other restricted financial assets</b>	<b>87,593</b>	<b>83,683</b>

<sup>1</sup> All related to mortgage loans that serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances. Of these pledged mortgage loans, approximately CHF 2.1 billion for 31 December 2017 (31 December 2016: approximately CHF 1.9 billion) could be withdrawn or used for future liabilities or covered bond issuances without breaching existing collateral requirements. <sup>2</sup> Does not include assets placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes (31 December 2017: CHF 2.5 billion; 31 December 2016: CHF 4.7 billion).

## Note 23 Restricted and transferred financial assets (continued)

### b) Transferred financial assets that are not derecognized in their entirety

The table below presents information for financial assets that have been transferred but are subject to continued recognition in full, as well as recognized liabilities associated with those transferred assets.

#### Transferred financial assets subject to continued recognition in full

<i>CHF million</i>	31.12.17		31.12.16	
	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet
Trading portfolio assets that may be sold or repledged by counterparties	35,363	12,942	30,260	11,260
<i>relating to securities lending and repurchase agreements in exchange for cash received</i>	13,145	12,942	11,410	11,260
<i>relating to securities lending agreements in exchange for securities received</i>	21,137	0	17,341	0
<i>relating to other financial asset transfers</i>	1,081	0	1,509	0
Financial assets designated at fair value that may be sold or repledged by counterparties	170	169	636	630
<b>Total financial assets transferred</b>	<b>35,533</b>	<b>13,111</b>	<b>30,896</b>	<b>11,890</b>

Transactions in which financial assets are transferred, but continue to be recognized in their entirety on UBS's balance sheet include securities lending and repurchase agreements as well as other financial asset transfers. Repurchase and securities lending arrangements are, for the most part, conducted under standard market agreements and are undertaken with counterparties subject to UBS's normal credit risk control processes.

→ Refer to Note 1a item 3e for more information on repurchase agreements and securities lending agreements

As of 31 December 2017, approximately one-third of the transferred financial assets were trading portfolio assets transferred in exchange for cash, in which case the associated recognized liability represents the amount to be repaid to counterparties. For securities lending and repurchase agreements, a haircut between 0% and 15% is generally applied to the transferred assets, which results in associated liabilities having a carrying value below the carrying value of the transferred assets. The counterparties to the associated liabilities presented in the table above have full recourse to UBS.

In securities lending arrangements entered into in exchange for the receipt of other securities as collateral, neither the securities received nor the obligation to return them are recognized on UBS's balance sheet, as the risks and rewards of ownership are not transferred to UBS. In cases where such financial assets received are subsequently sold or repledged in another transaction, this is not considered to be a transfer of financial assets.

Other financial asset transfers primarily include securities transferred to collateralize derivative transactions, for which the carrying value of associated liabilities is not provided in the table above because those replacement values are managed on a portfolio basis across counterparties and product types, and therefore there is no direct relationship between the specific collateral pledged and the associated liability.

Transferred financial assets that are not subject to derecognition in full, but remain on the balance sheet to the extent of the Group's continuing involvement, were not material as of 31 December 2017 and as of 31 December 2016.

## Note 23 Restricted and transferred financial assets (continued)

### c) Transferred financial assets that are derecognized in their entirety with continuing involvement

Continuing involvement in a transferred and fully derecognized financial asset may result from contractual provisions in the transfer agreement or from a separate agreement with the counterparty or a third party entered into in connection with the transfer.

#### Purchased and retained interests in securitization vehicles

In cases where UBS has transferred assets into a securitization vehicle and retained or purchased interests therein, UBS has a continuing involvement in those transferred assets.

As of 31 December 2017, the majority of the retained continuing involvement related to securitization positions held in the trading portfolio, primarily collateralized debt obligations, US commercial mortgage-backed securities and residential mortgage-backed securities. The fair value and carrying amount of UBS's continuing involvement related to these purchased and retained interests was CHF 8 million as of 31 December 2017, and UBS recognized gains of CHF 4 million in 2017 related to these positions. As of 31 December 2017, life-to-date losses of

CHF 1,170 million were recorded related to the positions held as of 31 December 2017.

As of 31 December 2016, the fair value and carrying amount of UBS's continuing involvement related to purchased and retained interests in securitization vehicles was CHF 5 million, and UBS recognized gains of CHF 11 million in 2016 related to these positions. As of 31 December 2016, life-to-date losses of CHF 1,173 million were recorded related to the positions held as of 31 December 2016.

The maximum exposure to loss related to purchased and retained interests in securitization structures was CHF 14 million as of 31 December 2017 compared with CHF 28 million as of 31 December 2016.

Undiscounted cash outflows of CHF 7 million may be payable to the transferee in future periods as a consequence of holding the purchased and retained interests. The earliest period in which payment may be required is less than one month.

### d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged, that are not recognized on the balance sheet, but that are held as collateral, including amounts that have been sold or repledged.

#### Off-balance sheet assets received

CHF million	31.12.17	31.12.16
Fair value of assets received that can be sold or repledged	469,132	429,327
<i>received as collateral under reverse repurchase, securities borrowing and lending arrangements, derivative transactions and other transactions<sup>1</sup></i>	462,460	423,524
<i>received in unsecured borrowings</i>	6,672	5,803
Thereof sold or repledged <sup>2</sup>	337,514	316,323
<i>in connection with financing activities</i>	293,295	277,341
<i>to satisfy commitments under short sale transactions</i>	30,463	22,824
<i>in connection with derivative and other transactions<sup>1</sup></i>	13,756	16,158

<sup>1</sup> Includes securities received as initial margin from its clients that UBS is required to remit to CCPs, brokers and deposit banks through its exchange-traded derivative (ETD) clearing and execution services. <sup>2</sup> Does not include off-balance sheet securities (31 December 2017: CHF 28.1 billion; 31 December 2016: CHF 30.9 billion) placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there are no associated liabilities or contingent liabilities.

## Note 24 Offsetting financial assets and financial liabilities

UBS enters into netting agreements with counterparties to manage the credit risks associated primarily with repurchase and reverse repurchase transactions, securities borrowing and lending, over-the-counter (OTC) derivatives and exchange-traded derivatives (ETD). These netting agreements and similar arrangements generally enable the counterparties to set off liabilities against available assets received in the ordinary course of business and / or in the event that the counterparty to the transaction is unable to fulfill its contractual obligations. The right of setoff is a legal right to settle or otherwise eliminate all or a portion of an amount due by applying an amount receivable from the same counterparty against it, thus reducing credit exposure.

The table below provides a summary of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral received to

mitigate credit exposures for these financial assets. The gross financial assets of the Group that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated balance sheet line, after giving effect to financial liabilities with the same counterparties that have been offset on the balance sheet and other financial assets not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial liabilities and collateral received that are not offset on the balance sheet are shown to arrive at financial assets after consideration of netting potential.

The Group engages in a variety of counterparty credit mitigation strategies in addition to netting and collateral arrangements. Therefore, the net amounts presented in the tables on this and on the next page do not purport to represent the Group's actual credit exposure.

### Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

	Assets subject to netting arrangements						Assets not subject to netting arrangements <sup>4</sup>	Total assets		
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet <sup>3</sup>				Assets recognized on the balance sheet	Total assets after consideration of netting potential	Total assets recognized on the balance sheet
	Gross assets before netting	Netting with gross liabilities <sup>2</sup>	Net assets recognized on the balance sheet	Financial liabilities	Collateral received	Assets after consideration of netting potential				
<i>As of 31.12.17, CHF billion</i>										
Cash collateral on securities borrowed	3.7	0.0	3.7	(0.6)	(3.1)	0.0	8.7	8.7	12.4	
Reverse repurchase agreements	140.5	(76.8)	63.7	(6.9)	(56.8)	0.0	13.5	13.5	77.2	
Positive replacement values	114.3	(2.1)	112.2	(83.5)	(20.7)	8.0	6.0	14.0	118.2	
Cash collateral receivables on derivative instruments <sup>1</sup>	21.6	(1.0)	20.6	(11.7)	(0.7)	8.1	2.9	11.0	23.4	
Financial assets designated at fair value	0.4	0.0	0.4	0.0	(0.2)	0.2	58.5	58.7	58.9	
<b>Total assets</b>	<b>280.5</b>	<b>(79.9)</b>	<b>200.6</b>	<b>(102.7)</b>	<b>(81.6)</b>	<b>16.4</b>	<b>89.6</b>	<b>106.0</b>	<b>290.2</b>	
<i>As of 31.12.16, CHF billion</i>										
Cash collateral on securities borrowed	4.2	0.0	4.2	(0.9)	(3.3)	0.0	10.9	10.9	15.1	
Reverse repurchase agreements	128.4	(71.5)	56.9	(2.1)	(54.8)	0.0	9.3	9.3	66.2	
Positive replacement values	152.3	(2.5)	149.8	(113.1)	(26.7)	10.0	8.6	18.6	158.4	
Cash collateral receivables on derivative instruments <sup>1</sup>	37.2	(15.1)	22.1	(14.2)	(1.0)	7.0	4.5	11.5	26.7	
Financial assets designated at fair value	1.7	0.0	1.7	0.0	(0.6)	1.1	63.7	64.7	65.4	
<b>Total assets</b>	<b>323.8</b>	<b>(89.1)</b>	<b>234.7</b>	<b>(130.3)</b>	<b>(86.3)</b>	<b>18.1</b>	<b>97.1</b>	<b>115.2</b>	<b>331.8</b>	

<sup>1</sup> The net amount of Cash collateral receivables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. Effective 3 January 2017, interest rate swaps and credit derivatives transacted with the Chicago Mercantile Exchange (CME) were legally converted from the previous collateral model to a settlement model resulting in a derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of CME interest rate swaps with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding IAS 32 netting, decreased by approximately CHF 11.4 billion as of 31 December 2017, with no change to net cash collateral receivables and payables on derivative instruments recognized and presented on the balance sheet. <sup>2</sup> The logic of the table results in amounts presented in the "Netting with gross liabilities" column corresponding directly to the amounts presented in the "Netting with gross assets" column in the liabilities table presented on the following page. <sup>3</sup> For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial assets presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. <sup>4</sup> Includes assets not subject to enforceable netting arrangements and other out-of-scope items.

## Note 24 Offsetting financial assets and financial liabilities (continued)

The table below provides a summary of financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral pledged to mitigate credit exposures for these financial liabilities. The gross financial liabilities of UBS that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated

balance sheet line, after giving effect to financial assets with the same counterparties that have been offset on the balance sheet and other financial liabilities not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial assets and collateral pledged that are not offset on the balance sheet are shown to arrive at financial liabilities after consideration of netting potential.

### Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

	Liabilities subject to netting arrangements						Liabilities not subject to netting arrangements <sup>4</sup>	Total liabilities		
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet <sup>3</sup>				Liabilities recognized on the balance sheet	Total liabilities after consideration of netting potential	Total liabilities recognized on the balance sheet
	Gross liabilities before netting	Netting with gross assets <sup>2</sup>	Net liabilities recognized on the balance sheet	Financial assets	Collateral pledged	Liabilities after consideration of netting potential				
<i>As of 31.12.17, CHF billion</i>										
Cash collateral on securities lent	1.7	0.0	1.7	(0.6)	(1.2)	0.0	0.1	0.1	1.8	
Repurchase agreements	88.4	(76.8)	11.6	(6.9)	(4.7)	0.0	3.6	3.6	15.3	
Negative replacement values	111.4	(2.1)	109.4	(83.5)	(15.0)	10.9	6.8	17.7	116.1	
Cash collateral payables on derivative instruments <sup>1</sup>	29.5	(1.0)	28.4	(16.3)	(1.2)	11.0	1.8	12.8	30.2	
Financial liabilities designated at fair value	1.9	0.0	1.9	0.0	(0.1)	1.8	52.3	54.1	54.2	
<b>Total liabilities</b>	<b>233.0</b>	<b>(79.9)</b>	<b>153.0</b>	<b>(107.3)</b>	<b>(22.1)</b>	<b>23.7</b>	<b>64.6</b>	<b>88.3</b>	<b>217.6</b>	
<i>As of 31.12.16, CHF billion</i>										
Cash collateral on securities lent	2.6	0.0	2.6	(0.9)	(1.7)	0.0	0.2	0.2	2.8	
Repurchase agreements	76.7	(71.5)	5.2	(2.1)	(3.1)	0.0	1.4	1.4	6.6	
Negative replacement values	146.3	(2.5)	143.9	(113.1)	(16.6)	14.2	10.0	24.2	153.8	
Cash collateral payables on derivative instruments <sup>1</sup>	48.5	(15.1)	33.4	(20.8)	(1.4)	11.2	2.1	13.3	35.5	
Financial liabilities designated at fair value	2.8	0.0	2.8	0.0	(0.2)	2.6	52.2	54.8	55.0	
<b>Total liabilities</b>	<b>276.9</b>	<b>(89.1)</b>	<b>187.9</b>	<b>(137.0)</b>	<b>(22.9)</b>	<b>28.0</b>	<b>65.9</b>	<b>93.9</b>	<b>253.7</b>	

<sup>1</sup> The net amount of Cash collateral payables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. Effective 3 January 2017, interest rate swaps and credit derivatives transacted with the Chicago Mercantile Exchange (CME) were legally converted from the previous collateral model to a settlement model resulting in a derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of CME interest rate swaps with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding IAS 32 netting, decreased by approximately CHF 11.4 billion as of 31 December 2017, with no change to net cash collateral receivables and payables on derivative instruments recognized and presented on the balance sheet. <sup>2</sup> The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding directly to the amounts presented in the "Netting with gross liabilities" column in the assets table presented on the previous page. <sup>3</sup> For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial liabilities presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. <sup>4</sup> Includes liabilities not subject to enforceable netting arrangements and other out-of-scope items.

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments

### a) Measurement categories of financial assets and liabilities

The table below provides information about the carrying amounts of individual classes of financial instruments within the measurement categories of financial assets and liabilities as defined in IAS 39, *Financial Instruments: Recognition and Measurement*. Only those assets and liabilities that are financial instruments as

defined in IAS 32, *Financial Instruments: Presentation* are included in the table below, which causes certain balances to differ from those presented on the balance sheet.

→ Refer to Note 22 for more information on how the fair value of financial instruments is determined

#### Measurement categories of financial assets and financial liabilities

CHF million	31.12.17	31.12.16
<b>Financial assets<sup>1</sup></b>		
<b>Held for trading</b>		
Trading portfolio assets	126,144	92,025
Due to customers <sup>2</sup>	7	12
Debt issued <sup>2</sup>	10	38
Positive replacement values	118,227	158,411
<b>Total</b>	<b>244,388</b>	<b>250,486</b>
<b>Fair value through profit or loss</b>		
Financial assets designated at fair value	58,933	65,353
Other assets	122	131
<b>Total</b>	<b>59,055</b>	<b>65,483</b>
<b>Financial assets at amortized cost</b>		
Cash and balances with central banks	87,775	107,767
Due from banks	13,739	13,156
Cash collateral on securities borrowed	12,393	15,111
Reverse repurchase agreements	77,240	66,246
Cash collateral receivables on derivative instruments	23,434	26,664
Loans <sup>3</sup>	319,568	306,325
Financial assets held to maturity	9,166	9,289
Other assets	27,913	18,504
<b>Total</b>	<b>571,226</b>	<b>563,063</b>
<b>Available for sale</b>		
Financial assets available for sale	8,665	15,676
<b>Total financial assets</b>	<b>883,335</b>	<b>894,709</b>
<b>Financial liabilities</b>		
<b>Held for trading</b>		
Trading portfolio liabilities	30,463	22,824
Negative replacement values	116,133	153,810
<b>Total</b>	<b>146,597</b>	<b>176,634</b>
<b>Fair value through profit or loss</b>		
Financial liabilities designated at fair value	54,202	55,017
Amounts due under unit-linked investment contracts	11,523	9,286
Other liabilities	122	131
<b>Total</b>	<b>65,847</b>	<b>64,434</b>
<b>Financial liabilities at amortized cost</b>		
Due to banks	7,533	10,645
Cash collateral on securities lent	1,789	2,818
Repurchase agreements	15,255	6,612
Cash collateral payables on derivative instruments	30,247	35,472
Due to customers	409,006	423,684
Debt issued	139,561	103,687
Other liabilities	36,268	38,349
<b>Total</b>	<b>639,659</b>	<b>621,267</b>
<b>Total financial liabilities</b>	<b>852,103</b>	<b>862,335</b>

<sup>1</sup> As of 31 December 2017, CHF 134 billion of Loans, CHF 0 billion of Due from banks, CHF 2 billion of Reverse repurchase agreements, CHF 7 billion of Financial assets available for sale, CHF 24 billion of Financial assets designated at fair value and CHF 7 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. As of 31 December 2016, CHF 126 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 10 billion of Financial assets available for sale, CHF 29 billion of Financial assets designated at fair value and CHF 8 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. <sup>2</sup> Represents the embedded derivative component of structured financial instruments for which the fair value option has not been applied and that is presented within Due to customers and Debt issued on the balance sheet. <sup>3</sup> Includes finance lease receivables of CHF 1.1 billion as of 31 December 2017 (31 December 2016: CHF 1.0 billion). Refer to Notes 10 and 31 for more information.

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### b) Maximum exposure to credit risk

The tables on the following pages provide the Group's maximum exposure to credit risk by class of financial instrument and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral, such as

real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security. The section "Risk management and control" describes management's view of credit risk and the related exposures, which can differ in certain respects from the requirements of IFRS.

#### Maximum exposure to credit risk

CHF billion	31.12.17								
	Maximum exposure to credit risk	Collateral				Credit enhancements			Exposure to credit risk after collateral and credit enhancements
		Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral <sup>1</sup>	Netting	Credit derivative contracts	Guarantees	
<b>Financial assets measured at amortized cost on the balance sheet</b>									
Balances with central banks	87.1								87.1
Due from banks <sup>2</sup>	13.7		0.1						13.6
Cash collateral on securities borrowed	12.4		12.2						0.2
Reverse repurchase agreements	77.2		72.8		4.2				0.2
Cash collateral receivables on derivative instruments <sup>3,4</sup>	23.4					12.5			11.0
Loans <sup>5</sup>	319.6	16.1	111.4	160.1	15.9		0.0	1.3	14.8
Financial assets held to maturity	9.2								9.2
Other assets	25.8		19.5						6.3
<b>Total financial assets measured at amortized cost</b>	<b>568.4</b>	<b>16.1</b>	<b>216.0</b>	<b>160.1</b>	<b>20.1</b>	<b>12.5</b>	<b>0.0</b>	<b>1.3</b>	<b>142.3</b>
<b>Financial assets measured at fair value on the balance sheet</b>									
Positive replacement values <sup>4</sup>	118.2		4.0			100.2			14.0
Trading portfolio assets – debt instruments <sup>6,7</sup>	25.6								25.6
Financial assets designated at fair value – debt instruments <sup>8</sup>	58.4		9.8						48.5
Financial assets available for sale – debt instruments <sup>8</sup>	7.9								7.9
<b>Total financial assets measured at fair value</b>	<b>210.1</b>	<b>0.0</b>	<b>13.8</b>	<b>0.0</b>	<b>0.0</b>	<b>100.2</b>	<b>0.0</b>	<b>0.0</b>	<b>96.1</b>
<b>Total maximum exposure to credit risk reflected on the balance sheet</b>									
Guarantees <sup>9</sup>	18.8	1.0	2.1	0.2	1.2			3.0	11.3
Loan commitments <sup>9</sup>	39.1		2.8	1.1	9.5		1.0	1.4	23.3
Forward starting transactions, reverse repurchase and securities borrowing agreements	12.7		12.4						0.3
<b>Total maximum exposure to credit risk not reflected on the balance sheet</b>	<b>70.6</b>	<b>1.0</b>	<b>17.4</b>	<b>1.2</b>	<b>10.7</b>	<b>0.0</b>	<b>1.0</b>	<b>4.4</b>	<b>34.8</b>
<b>Total</b>	<b>849.1</b>	<b>17.2</b>	<b>247.1</b>	<b>161.3</b>	<b>30.8</b>	<b>112.7</b>	<b>1.1</b>	<b>5.8</b>	<b>273.2</b>

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### Maximum exposure to credit risk (continued)

CHF billion	31.12.16								
	Maximum exposure to credit risk	Collateral				Credit enhancements			Exposure to credit risk after collateral and credit enhancements
Cash collateral received		Collateralized by securities	Secured by real estate	Other collateral <sup>1</sup>	Netting	Credit derivative contracts	Guarantees		
<b>Financial assets measured at amortized cost on the balance sheet</b>									
Balances with central banks	107.1								107.1
Due from banks <sup>2</sup>	13.2								13.2
Cash collateral on securities borrowed	15.1		14.8						0.3
Reverse repurchase agreements	66.2		62.5		3.2				0.5
Cash collateral receivables on derivative instruments <sup>3,4</sup>	26.7					15.1			11.5
Loans <sup>5</sup>	306.3	17.4	99.6	158.2	14.6		0.1	1.8	14.6
Financial assets held to maturity	9.3								9.3
Other assets	18.6		10.0						8.7
<b>Total financial assets measured at amortized cost</b>	<b>562.5</b>	<b>17.4</b>	<b>186.9</b>	<b>158.2</b>	<b>17.7</b>	<b>15.1</b>	<b>0.1</b>	<b>1.8</b>	<b>165.2</b>
<b>Financial assets measured at fair value on the balance sheet</b>									
Positive replacement values <sup>4</sup>	158.4		5.3			134.5			18.6
Trading portfolio assets – debt instruments <sup>6,7</sup>	21.8								21.8
Financial assets designated at fair value – debt instruments <sup>8</sup>	64.8		2.6				0.6		61.6
Financial assets available for sale – debt instruments <sup>9</sup>	14.9								14.9
<b>Total financial assets measured at fair value</b>	<b>259.9</b>	<b>0.0</b>	<b>7.9</b>	<b>0.0</b>	<b>0.0</b>	<b>134.5</b>	<b>0.6</b>	<b>0.0</b>	<b>116.9</b>
<b>Total maximum exposure to credit risk reflected on the balance sheet</b>									
Guarantees <sup>9</sup>	16.7	1.4	2.0	0.2	1.2		0.1	3.0	8.8
Loan commitments <sup>9</sup>	54.4	0.1	3.9	1.0	9.5		4.8	2.0	33.1
Forward starting transactions, reverse repurchase and securities borrowing agreements	10.2		10.2						0.0
<b>Total maximum exposure to credit risk not reflected on the balance sheet</b>	<b>81.3</b>	<b>1.5</b>	<b>16.1</b>	<b>1.1</b>	<b>10.6</b>	<b>0.0</b>	<b>4.9</b>	<b>5.1</b>	<b>41.9</b>
<b>Total</b>	<b>903.7</b>	<b>18.9</b>	<b>210.9</b>	<b>159.4</b>	<b>28.4</b>	<b>149.6</b>	<b>5.7</b>	<b>6.8</b>	<b>324.0</b>

<sup>1</sup> Includes but is not limited to life insurance contracts, inventory, accounts receivable, mortgage loans, patents and copyrights. <sup>2</sup> Due from banks includes amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. <sup>3</sup> Included within Cash collateral receivables on derivative instruments are margin balances due from exchanges or clearing houses. Some of these margin balances reflect amounts transferred on behalf of clients who retain the associated credit risk. <sup>4</sup> The amount shown in the netting column represents the netting potential not recognized on the balance sheet. Refer to Note 24 for more information. <sup>5</sup> Collateral arrangements generally incorporate a range of collateral, including cash, securities, property and other collateral. In 2017, we further aligned our collateral allocation processes within Wealth Management Americas to prioritize collateral mainly according to its liquidity profile. This change resulted in increases in loans secured by cash and decreases in loans secured by securities of CHF 4.5 billion. <sup>6</sup> These positions are generally managed under the market risk framework. For the purpose of this disclosure, collateral and credit enhancements were not considered. <sup>7</sup> Does not include debt instruments held for unit-linked investment contracts and investment fund units. <sup>8</sup> Does not include investment fund units. Financial assets designated at fair value collateralized by securities consisted of structured loans and reverse repurchase and securities borrowing agreements. <sup>9</sup> The amount shown in the "Guarantees" column largely relates to sub-participations. Refer to the "Treasury management" section of this report for more information.

### Maximum exposure to credit risk for financial assets designated at fair value

The maximum exposure to credit risk of loans, but not structured loans, designated at fair value is generally mitigated by credit derivatives or similar instruments. As of 31 December 2017, the credit risk of such loans with a total notional amount of CHF 4 million (31 December 2016: CHF 609 million) was mitigated by credit derivatives for which the notional amount and fair value were not material (31 December 2016: notional amount was CHF 578 million, fair value was negative CHF 7 million).

Changes in the fair value of loans designated at fair value attributable to changes in credit risk were not material for the years ended 31 December 2017 and 31 December 2016 and from inception until 31 December 2017 and 31 December 2016.

Similarly, changes in the fair value of credit derivatives mitigating the credit risk of loans designated at fair value were not material for the years ended 31 December 2017 and 31 December 2016 and from inception until 31 December 2017 and 31 December 2016.

→ Refer to Note 22 for more information on financial assets designated at fair value



## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### c) Financial assets subject to credit risk by rating category

#### Financial assets subject to credit risk by rating category

<i>CHF billion</i>		31.12.17					
Rating category <sup>1</sup>	0-1	2-3	4-5	6-8	9-13	Defaulted	Total
Balances with central banks	86.6	0.5					87.1
Due from banks	0.6	10.6	1.4	0.9	0.3		13.7
Cash collateral on securities borrowed and reverse repurchase agreements	24.3	36.4	16.8	10.4	1.8		89.6
Positive replacement values	17.0	75.3	19.4	6.2	0.3		118.2
Cash collateral receivables on derivative instruments	6.5	9.7	5.6	1.6	0.1		23.4
Trading portfolio assets – debt instruments <sup>2</sup>	10.3	7.3	3.0	2.0	3.0		25.6
Loans	3.2	161.8	65.4	70.0	17.6	1.5	319.6
Financial assets designated at fair value – debt instruments <sup>3</sup>	33.8	14.2	1.5	0.8	8.0		58.4
Financial assets available for sale – debt instruments <sup>3</sup>	6.8	1.0		0.1			7.9
Financial assets held to maturity	8.5	0.7					9.2
Other assets	0.1	0.4	8.3	15.9	0.8	0.3	25.8
<b>Guarantees, commitments and forward starting transactions</b>							
Guarantees	2.0	9.1	4.1	2.7	0.8	0.2	18.8
Loan commitments	1.9	15.4	9.4	5.8	6.5		39.1
Forward starting transactions, reverse repurchase and securities borrowing agreements		12.7					12.7
<b>Total</b>	<b>201.7</b>	<b>354.9</b>	<b>134.8</b>	<b>116.5</b>	<b>39.1</b>	<b>2.0</b>	<b>849.1</b>

		31.12.16					
Rating category <sup>1</sup>	0-1	2-3	4-5	6-8	9-13	Defaulted	Total
Balances with central banks	106.2	0.9					107.1
Due from banks	0.6	9.7	2.0	0.5	0.3		13.2
Cash collateral on securities borrowed and reverse repurchase agreements	29.2	24.5	20.1	6.9	0.7		81.4
Positive replacement values	19.6	96.9	34.2	7.4	0.4		158.4
Cash collateral receivables on derivative instruments	6.4	12.2	6.4	1.6	0.2		26.7
Trading portfolio assets – debt instruments <sup>2</sup>	9.0	6.8	2.9	1.7	1.3		21.8
Loans	31.7	127.2	63.1	63.6	19.1	1.6	306.3
Financial assets designated at fair value – debt instruments <sup>3</sup>	48.4	12.6	1.0	1.6	1.3		64.8
Financial assets available for sale – debt instruments <sup>3</sup>	12.7	1.8	0.2	0.1			14.9
Financial assets held to maturity	8.4	0.9					9.3
Other assets	0.1	2.0	6.2	7.7	2.2	0.3	18.6
<b>Guarantees, commitments and forward starting transactions</b>							
Guarantees	2.0	6.4	3.7	3.6	0.7	0.3	16.7
Loan commitments	2.4	19.5	17.1	8.7	6.5	0.1	54.4
Forward starting transactions, reverse repurchase and securities borrowing agreements	0.6	9.4	0.3				10.2
<b>Total</b>	<b>277.4</b>	<b>330.9</b>	<b>157.1</b>	<b>103.5</b>	<b>32.7</b>	<b>2.2</b>	<b>903.7</b>

<sup>1</sup> Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories. <sup>2</sup> Does not include debt instruments held for unit-linked investment contracts and investment fund units. <sup>3</sup> Does not include investment fund units.

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### d) Maturity analysis of financial liabilities

The contractual maturities for non-derivative and non-trading financial liabilities as of 31 December 2017 are based on the earliest date on which UBS could be contractually required to pay. The total amounts that contractually mature in each time band are also shown for 31 December 2016. Derivative positions

and trading liabilities, predominantly made up of short sale transactions, are assigned to the column *Due within 1 month*, as this provides a conservative reflection of the nature of these trading activities. The contractual maturities may extend over significantly longer periods.

#### Maturity analysis of financial liabilities<sup>1</sup>

CHF billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
<b>Financial liabilities recognized on balance sheet<sup>2</sup></b>						
Due to banks	6.1	0.4	1.0	0.1	0.0	7.5
Cash collateral on securities lent	1.7	0.2				1.9
Repurchase agreements	11.9	2.8	0.6	0.0	0.0	15.3
Trading portfolio liabilities <sup>3,4</sup>	30.5					30.5
Negative replacement values <sup>3</sup>	116.1					116.1
Cash collateral payables on derivative instruments	30.2					30.2
Due to customers	393.0	10.2	5.2	0.7	0.0	409.1
Financial liabilities designated at fair value <sup>5</sup>	18.4	10.3	11.6	8.8	7.1	56.3
Debt issued <sup>6</sup>	4.1	15.0	45.2	50.8	38.1	153.2
Other liabilities	46.7					46.7
<b>Total 31.12.17</b>	<b>658.7</b>	<b>39.0</b>	<b>63.5</b>	<b>60.4</b>	<b>45.2</b>	<b>866.8</b>
Total 31.12.16	704.3	39.2	40.4	46.6	46.0	876.6
<b>Guarantees, commitments and forward starting transactions<sup>7</sup></b>						
Loan commitments	38.2	0.2	0.2	0.1		38.7
Guarantees	18.8	0.0				18.9
<b>Forward starting transactions</b>						
Reverse repurchase agreements	12.7					12.7
Securities borrowing agreements	0.0					0.0
<b>Total 31.12.17</b>	<b>69.7</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>70.2</b>
Total 31.12.16	81.0	0.2	0.2	0.0	0.0	81.4

<sup>1</sup> Non-financial liabilities such as deferred income, deferred tax liabilities, provisions and liabilities on employee compensation plans are not included in this analysis. <sup>2</sup> Except for trading portfolio liabilities and negative replacement values (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. <sup>3</sup> Carrying value is fair value. Management believes that this best represents the cash flows that would have to be paid if these positions had to be settled or closed out. Refer to Note 12 for undiscounted cash flows of derivatives designated in hedge accounting relationships. <sup>4</sup> Contractual maturities of trading portfolio liabilities are: CHF 29.5 billion due within one month (2016: CHF 21.8 billion), CHF 0.8 billion due between one month and one year (2016: CHF 1.0 billion) and CHF 0.1 billion due between 1 and 5 years (2016: CHF 0.1 billion). <sup>5</sup> Future interest payments on variable rate liabilities are determined by reference to the applicable interest rate prevailing as of the reporting date. Future principal payments that are variable are determined by reference to the conditions existing at the reporting date. <sup>6</sup> The time bucket Due after 5 years includes perpetual loss-absorbing additional tier 1 capital instruments. <sup>7</sup> Comprises the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

### e) Reclassification of financial assets

In 2008 and 2009, certain financial assets were reclassified from *Trading portfolio assets* to *Loans*. On their reclassification date, these assets had fair values of CHF 26 billion and CHF 0.6 billion, respectively.

The reclassification of financial assets reflected UBS's change in intent and ability to hold these financial assets for the foreseeable future rather than for trading in the near term. The financial assets were reclassified using their fair value on the date of the reclassification, which became their new cost basis at that date.

As of 31 December 2017, the carrying value of the remaining

reclassified financial assets, which were entirely comprised of municipal auction rate securities, was CHF 0.1 billion (31 December 2016: CHF 0.2 billion), which was approximately equal to the fair value of these assets.

The overall effect on operating profit before tax from reclassified financial assets for the year ended 31 December 2017 was a profit of CHF 1 million (2016: CHF 1 million). If the financial assets had not been reclassified, the impact on operating profit before tax for the year ended 31 December 2017 would have been a loss of CHF 4 million.

## Note 26 Pension and other post-employment benefit plans

The table below provides information about expenses for pension and other post-employment benefit plans. These expenses are part of *Personnel expenses*.

### Income statement – expenses related to pension and other post-employment benefit plans

CHF million	31.12.17	31.12.16	31.12.15
Net periodic expenses for defined benefit plans	471	435	569
of which: related to major pension plans <sup>1</sup>	452	412	546
of which: Swiss plan <sup>2</sup>	406	381	515
of which: UK plan	14	(2)	18
of which: US and German plans	31	33	12
of which: related to post-employment medical insurance plans <sup>3</sup>	3	4	4
of which: UK plan	1	1	1
of which: US plans	2	3	2
of which: related to remaining plans and other expenses <sup>4</sup>	17	19	19
Expenses for defined contribution plans <sup>5</sup>	239	236	239
of which: UK plans	71	77	86
of which: US plan	108	106	100
of which: remaining plans	59	53	53
<b>Total pension and other post-employment benefit plan expenses<sup>6</sup></b>	<b>710</b>	<b>670</b>	<b>808</b>

<sup>1</sup> Refer to Note 26a for more information. <sup>2</sup> The increase in net periodic pension expenses for the Swiss pension plan between 2017 and 2016 related primarily to lower curtailments, partly offset by lower expenses due to changes in demographic and financial assumptions. <sup>3</sup> Refer to Note 26b for more information. <sup>4</sup> Other expenses include differences between actual and estimated performance award accruals and net accrued pension expenses related to restructuring. <sup>5</sup> Refer to Note 26c for more information. <sup>6</sup> Refer to Note 6.

The table below provides information relating to amounts recognized in *Other comprehensive income* for defined benefit plans.

### Other comprehensive income – gains / (losses) on defined benefit plans

CHF million	31.12.17	31.12.16	31.12.15
Major pension plans <sup>1</sup>	245	(837)	339
of which: Swiss plan	(78)	(105)	58
of which: UK plan	295	(610)	317
of which: US and German plans	28	(122)	(35)
Post-employment medical insurance plans <sup>2</sup>	1	(13)	(3)
of which: UK plan	1	(6)	6
of which: US plans	0	(7)	(9)
Remaining plans	31	(26)	(14)
Gains / (losses) recognized in other comprehensive income, before tax	277	(876)	322
Tax (expense) / benefit relating to defined benefit plans recognized in other comprehensive income	11	52	(19)
<b>Gains / (losses) recognized in other comprehensive income, net of tax<sup>3</sup></b>	<b>288</b>	<b>(824)</b>	<b>304</b>
of which: attributable to shareholders	288	(824)	298
of which: attributable to non-controlling interests	0	0	5

<sup>1</sup> Refer to Note 26a for more information. <sup>2</sup> Refer to Note 26b for more information. <sup>3</sup> Refer to the "Statement of comprehensive income."

## Note 26 Pension and other post-employment benefit plans (continued)

UBS recognizes assets and liabilities with respect to defined benefit plans within *Other assets* and *Other liabilities*.

As of 31 December 2017 and 31 December 2016, the Swiss pension plan was in a surplus situation. However, a surplus is only recognized on the balance sheet to the extent that it does

not exceed the estimated future economic benefit. Since the estimated future economic benefit was zero as of 31 December 2017 and 31 December 2016, no net defined benefit pension asset was recognized on the balance sheet.

The table below provides information on UBS's liabilities with respect to defined benefit plans.

### Balance sheet – net defined benefit pension and post-employment liability

CHF million	31.12.17	31.12.16
Major pension plans <sup>1</sup>	805	1,140
<i>of which: Swiss plan</i>	0	0
<i>of which: UK plan</i>	268	529
<i>of which: US and German plans<sup>2</sup></i>	536	611
Post-employment medical insurance plans <sup>3</sup>	86	91
<i>of which: UK plan</i>	26	26
<i>of which: US plans</i>	59	65
Remaining plans	35	35
<b>Total net defined benefit pension and post-employment liability<sup>4</sup></b>	<b>925</b>	<b>1,266</b>

<sup>1</sup> Refer to Note 26a for more information. <sup>2</sup> Of the total liability as of 31 December 2017, CHF 149 million related to US plans and CHF 388 million related to German plans (31 December 2016: CHF 265 million related to US plans and CHF 346 million related to German plans). <sup>3</sup> Refer to Note 26b for more information. <sup>4</sup> Refer to Note 21.

## Note 26 Pension and other post-employment benefit plans (continued)

### a) Defined benefit pension plans

UBS has established defined benefit pension plans for its employees in various jurisdictions, with the major plans located in Switzerland, the UK, the US and Germany.

The overall investment policy and strategy for UBS's defined benefit pension plans is guided by the objective of achieving an investment return that, together with contributions, ensures that there will be sufficient assets to pay pension benefits as they fall due while also mitigating various risks. For the plans with assets, i.e. funded plans, the investment strategies are managed under local laws and regulations in each jurisdiction. The asset allocation is determined by the governance body with reference to the prevailing current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. Within this framework, UBS ensures that the fiduciaries consider how the asset investment strategy correlates with the maturity profile of the plan liabilities and the respective potential effect on the funded status of the plans, including potential short-term liquidity requirements.

The defined benefit obligations (DBOs) for all of UBS's defined benefit pension plans are directly affected by changes in yields of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan, as the applicable discount rate used to determine the DBO is based on these yields. For the funded plans, the pension assets are invested in a diversified portfolio of financial assets, including real estate, bonds, investment funds and cash, across geographic regions to ensure a balance of risk and return. Under IAS 19, volatility arises in each pension plan's net asset / liability position because the fair value of the plan's financial assets is not fully correlated to movements in the value of the plan's DBO. Specific asset-liability matching strategies for each pension plan are independently determined by the responsible governance body. The net asset / liability volatility for each plan is dependent on the specific financial assets chosen by each plan's governance body. For certain pension plans, a liability-driven investment approach is applied to a portion of the plan assets to reduce potential volatility.

#### Swiss pension plan

The Swiss pension plan covers employees of UBS AG and employees of companies having close economic or financial ties with UBS and exceeds the minimum benefit requirements under Swiss pension law.

Contributions to the pension plan are paid by both the employer and the employees. The Swiss pension plan allows employees to choose the level of contributions paid by them. Employee contributions are calculated as a percentage of the contributory salary and are deducted monthly. The percentages deducted from salary depend on age and choice of contribution category and vary between 1% and 13.5% of contributory base salary and between 0% and 9% of contributory variable compensation. Depending on the age of the employee, UBS pays a contribution that ranges between 6.5% and 27.5% of contributory base salary and between 3.6% and 9% of contributory variable compensation. UBS also pays risk contributions that are used to finance benefits paid out in the event of death and disability, as well as to finance bridging pensions.

The plan benefits include retirement, disability and survivor benefits. The pension plan offers to members at the normal retirement age of 64 a choice between a lifetime pension with or without full restitution and a partial or full lump sum payment. Members can draw early retirement benefits starting from the age of 58. Employees have the possibility to make additional purchases of benefits to fund early retirement benefits (Plan 58+).

The pension amount payable is a result of the conversion rate applied on the accumulated balance of the individual plan participant's pension account at the retirement date. The accumulated balance of each individual plan participant's pension account is based on credited vested benefits transferred from previous employers, purchases of benefits and the employee and employer contributions that have been made to the pension account of each individual plan participant, as well as the interest accrued on the accumulated balance. The interest rate accrued is defined annually by the Pension Foundation Board.

Although the Swiss pension plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IAS 19, primarily because of the obligation to accrue interest on the pension accounts and the payment of lifetime pension benefits.

## Note 26 Pension and other post-employment benefit plans (continued)

The Swiss pension plan is governed by a Pension Foundation Board. The responsibilities of this board are defined by Swiss pension law and by the plan rules. An actuarial valuation under Swiss pension law is performed regularly. According to Swiss pension law, a temporary limited underfunding is permitted. However, should an underfunded situation occur, the Pension Foundation Board is required to take the necessary measures to ensure that full funding can be expected to be restored within a maximum period of 10 years. If a Swiss pension plan were to become significantly underfunded on a Swiss pension law basis, additional employer and employee contributions could be required. In this situation, the risk is shared between employer and employees, and the employer is not legally obliged to cover more than 50% of the additional contributions required. As of 31 December 2017, the Swiss pension plan had a technical funding ratio under Swiss pension law of 131.9% (31 December 2016: 125.4%).

The investment strategy of the Swiss plan is implemented on the basis of a multi-level investment and risk management process and complies with Swiss pension law, including the rules and regulations relating to diversification of plan assets. These rules, among others, specify restrictions to the composition of plan assets, e.g., there is a limit of 50% for investments in equities. The investment strategy of the Swiss plan is aligned with the defined risk budget set out by the Pension Foundation Board. The risk budget is determined on the basis of regularly performed asset and liability management analyses. In order to implement the risk budget, the Swiss plan may use direct investments, investment funds and derivatives. To mitigate foreign currency risk, a specific currency hedging strategy is in place. The Pension Foundation Board strives for a medium- and long-term balance between assets and liabilities.

As of 31 December 2017, the Swiss pension plan was in a surplus situation on an International Financial Reporting Standards (IFRS) measurement basis, as the fair value of plan assets exceeded the DBO by CHF 3,156 million (31 December 2016: surplus of CHF 1,749 million). However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit, which equals the difference between the present value of the estimated future net service cost and the present value of the estimated future employer contributions. The maximum future economic benefit is highly variable based on changes in the discount rate. Both as of 31 December 2017 and 31 December 2016, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet. As of 31 December 2017, the difference between the pension plan surplus and the estimated future economic benefit, i.e., the asset ceiling effect, was CHF 3,156 million (31 December 2016: CHF 1,749 million). CHF 1,394 million out of the total movement of CHF 1,407 million was recognized in *Other comprehensive income* and CHF 13 million related to interest expense on the asset ceiling effect was recognized in the income statement. As of 31 December 2016, CHF 452 million out of the total movement of CHF 466 million was recognized in *Other*

*comprehensive income* and CHF 14 million related to interest expense on the asset ceiling effect was recognized in the income statement.

The employer contributions expected to be made to the Swiss pension plan in 2018 are estimated to be CHF 470 million.

→ **Refer to Note 35 for information on changes to the Swiss pension plan that will take effect from the start of 2019**

### Non-Swiss pension plans

UBS locations outside of Switzerland offer various defined benefit pension plans in accordance with local regulations and practices. The non-Swiss locations with major defined benefit pension plans are the UK, the US and Germany. Defined benefit pension plans in other locations are not material to the financial results of UBS and hence not separately disclosed.

The non-Swiss plans provide benefits in the event of retirement, death or disability. The level of benefits provided depends on the specific rate of benefit accrual and the level of employee compensation. UBS's general principle is to ensure that the plans are adequately funded on the basis of actuarial valuations. Local pension regulations and tax requirements are the primary drivers for determining when contributions are required.

### UK pension plan

The UK plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation. Normal retirement age for participants in the UK plan is 60. The UK plan is closed to new entrants and pension plan participants are no longer accruing benefits for current or future service. Employees instead participate in the UK defined contribution plan.

The governance responsibility for the UK plan lies jointly with the Pension Trustee Board, which is required under local pension laws, and UBS. The employer contributions to the pension fund reflect agreed-upon deficit-funding contributions, which are determined on the basis of the most recent actuarial valuation using assumptions agreed by the Pension Trustee Board and UBS. In the event of underfunding, UBS and the Pension Trustee Board must agree on a deficit recovery plan within statutory deadlines. In 2017 and 2016, UBS did not make any deficit-funding contributions.

The plan assets are invested in a diversified portfolio of financial assets. A liability-driven investment approach is applied, as a portion of the plan assets is invested in inflation-indexed bonds that provide a partial hedge against price inflation. If price inflation increases, the DBO will likely increase more significantly than the change in the fair value of plan assets, which would result in an increase in the net defined benefit liability. Plan rules and local pension legislation cap the level of inflationary increase that can be applied to plan benefits.

As the plan is obligated to provide guaranteed lifetime pension benefits to plan participants upon retirement, increases in life expectancy will result in an increase in the plan's liabilities. The sensitivity to changes in life expectancy is particularly high in the UK plan as the pension benefits are indexed to price inflation.

## Note 26 Pension and other post-employment benefit plans (continued)

As of 31 December 2017, the UK plan was in a deficit situation on an IFRS measurement basis as the DBO exceeded the fair value of plan assets by CHF 268 million (31 December 2016: deficit of CHF 529 million).

No employer contributions are currently scheduled to be made to the UK defined benefit pension plan in 2018, subject to periodic review.

### *US pension plans*

There are two distinct major defined benefit pension plans in the US. Normal retirement age for participants in both US plans is 65. The plans are closed to new entrants, who instead can participate in defined contribution plans.

One of the major defined benefit pension plans is a contribution-based plan in which each participant accrues a percentage of salary in a pension account. The pension account is credited annually with interest based on a rate that is linked to the average yield on one-year US government bonds. For the other major defined benefit pension plan, retirement benefits accrue based on the career-average earnings of each individual plan participant. Former employees with vested benefits have the option to take a lump sum payment or a lifetime annuity commencing early or at retirement age.

As required under local state pension laws, both plans have fiduciaries who, together with UBS, are responsible for the governance of the plans. UBS regularly reviews the contribution strategy for these plans. In determining the contribution strategy, UBS considers local statutory funding rules and the cost of any premiums that must be paid to the Pension Benefit Guaranty Corporation for having an underfunded plan. In 2017, the contributions made by UBS were CHF 89 million (2016: CHF 172 million).

The plan assets for both plans are invested in a diversified portfolio of financial assets. Each pension plan's fiduciaries are responsible for the investment decisions with respect to the plan

assets. Both US plans apply a liability-driven investment approach to support the volatility management in the net asset / liability position. Derivative instruments may also be employed to manage volatility.

The employer contributions expected to be made to the US defined benefit pension plans in 2018 are estimated to be CHF 8 million.

### *German pension plans*

There are two different defined benefit pension plans in Germany, and both are contribution-based plans. No plan assets are set aside to fund these plans, and benefits are directly paid by UBS. Normal retirement age for the participants in the German plans is 65. Within the larger of the two pension plans, each participant accrues a percentage of salary in a pension account. The accumulated account balance of the plan participant is credited on an annual basis with guaranteed interest at a rate of 5%. In the other plan, amounts are accrued annually based on employee elections. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 4% for amounts accrued after 2009. Both German plans are regulated under German pension law, under which the responsibility to pay pension benefits when they are due rests entirely with UBS. For the German plans, a portion of the pension payments is directly increased in line with price inflation.

The benefits expected to be paid by UBS to the participants of the German plans in 2018 are estimated to be CHF 10 million.

### *Financial information by plan*

The tables on the following pages provide an analysis of the movement in the net asset / liability recognized on the balance sheet for defined benefit pension plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

## Note 26 Pension and other post-employment benefit plans (continued)

<b>Defined benefit pension plans</b>								
<i>CHF million</i>	Swiss plan		UK plan		US and German plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended	<b>31,12,17</b>	31,12,16	<b>31,12,17</b>	31,12,16	<b>31,12,17</b>	31,12,16	<b>31,12,17</b>	31,12,16
Defined benefit obligation at the beginning of the year	<b>22,865</b>	22,636	<b>3,704</b>	3,350	<b>1,755</b>	1,619	<b>28,325</b>	27,605
Current service cost	<b>448</b>	471	<b>0</b>	0	<b>9</b>	9	<b>456</b>	480
Interest expense	<b>163</b>	240	<b>100</b>	116	<b>61</b>	62	<b>325</b>	419
Plan participant contributions	<b>205</b>	210	<b>0</b>	0	<b>0</b>	0	<b>205</b>	210
Remeasurements	<b>303</b>	477	<b>(82)</b>	922	<b>80</b>	125	<b>301</b>	1,524
<i>of which: actuarial (gains) / losses due to changes in demographic assumptions</i>	<b>6</b>	(659)	<b>(80)</b>	(63)	<b>(5)</b>	3	<b>(79)</b>	(719)
<i>of which: actuarial (gains) / losses due to changes in financial assumptions</i>	<b>145</b>	698	<b>47</b>	1,022	<b>84</b>	107	<b>276</b>	1,827
<i>of which: experience (gains) / losses<sup>1</sup></i>	<b>152</b>	438	<b>(49)</b>	(37)	<b>2</b>	15	<b>104</b>	416
Curtailments	<b>(49)</b>	(96)	<b>0</b>	0	<b>0</b>	0	<b>(49)</b>	(96)
Benefit payments	<b>(1,098)</b>	(1,074)	<b>(251)</b>	(135)	<b>(107)</b>	(98)	<b>(1,457)</b>	(1,307)
Other movements	<b>(8)</b>	0	<b>0</b>	0	<b>0</b>	19	<b>(8)</b>	19
Foreign currency translation	<b>0</b>	0	<b>179</b>	(549)	<b>(29)</b>	20	<b>150</b>	(529)
<b>Defined benefit obligation at the end of the year</b>	<b>22,828</b>	22,865	<b>3,650</b>	3,704	<b>1,770</b>	1,755	<b>28,248</b>	28,325
<i>of which: amounts owed to active members</i>	<b>10,470</b>	10,419	<b>176</b>	290	<b>248</b>	258	<b>10,894</b>	10,967
<i>of which: amounts owed to deferred members</i>	<b>0</b>	0	<b>1,881</b>	2,210	<b>628</b>	584	<b>2,510</b>	2,794
<i>of which: amounts owed to retirees</i>	<b>12,358</b>	12,446	<b>1,593</b>	1,204	<b>893</b>	913	<b>14,844</b>	14,563
Fair value of plan assets at the beginning of the year	<b>24,614</b>	23,919	<b>3,175</b>	3,400	<b>1,144</b>	997	<b>28,934</b>	28,316
Return on plan assets excluding amounts included in interest income	<b>1,619</b>	824	<b>213</b>	312	<b>108</b>	2	<b>1,939</b>	1,139
Interest income	<b>178</b>	258	<b>86</b>	118	<b>44</b>	44	<b>307</b>	420
Employer contributions	<b>477</b>	486	<b>0</b>	0	<b>97</b>	179	<b>574</b>	665
Plan participant contributions	<b>205</b>	210	<b>0</b>	0	<b>0</b>	0	<b>205</b>	210
Benefit payments	<b>(1,098)</b>	(1,074)	<b>(251)</b>	(135)	<b>(107)</b>	(98)	<b>(1,457)</b>	(1,307)
Administration expenses, taxes and premiums paid	<b>(10)</b>	(10)	<b>0</b>	0	<b>(4)</b>	(6)	<b>(14)</b>	(16)
Foreign currency translation	<b>0</b>	0	<b>159</b>	(520)	<b>(48)</b>	26	<b>111</b>	(494)
<b>Fair value of plan assets at the end of the year</b>	<b>25,984</b>	24,614	<b>3,381</b>	3,175	<b>1,234</b>	1,144	<b>30,599</b>	28,934
Asset ceiling effect at the beginning of the year	<b>1,749</b>	1,283	<b>0</b>	0	<b>0</b>	0	<b>1,749</b>	1,283
Interest expense on asset ceiling effect	<b>13</b>	14	<b>0</b>	0	<b>0</b>	0	<b>13</b>	14
Asset ceiling effect excluding interest expense on asset ceiling effect	<b>1,394</b>	452	<b>0</b>	0	<b>0</b>	0	<b>1,394</b>	452
<b>Asset ceiling effect at the end of the year</b>	<b>3,156</b>	1,749	<b>0</b>	0	<b>0</b>	0	<b>3,156</b>	1,749
<b>Net defined benefit asset / (liability)</b>	<b>0</b>	0	<b>(268)</b>	(529)	<b>(536)</b>	(611)	<b>(805)</b>	(1,140)
<b>Movement in the net asset / (liability) recognized on the balance sheet</b>								
<b>Net asset / (liability) recognized on the balance sheet at the beginning of the year</b>	<b>0</b>	0	<b>(529)</b>	50	<b>(611)</b>	(622)	<b>(1,140)</b>	(572)
Net periodic expenses recognized in net profit	<b>(406)</b>	(381)	<b>(14)</b>	2	<b>(31)</b>	(33)	<b>(452)</b>	(412)
Gains / (losses) recognized in other comprehensive income	<b>(78)</b>	(105)	<b>295</b>	(610)	<b>28</b>	(122)	<b>245</b>	(837)
Employer contributions	<b>477</b>	486	<b>0</b>	0	<b>97</b>	179	<b>574</b>	665
Other movements	<b>8</b>	0	<b>0</b>	0	<b>0</b>	(19)	<b>8</b>	(19)
Foreign currency translation	<b>0</b>	0	<b>(20)</b>	29	<b>(20)</b>	6	<b>(39)</b>	35
<b>Net asset / (liability) recognized on the balance sheet at the end of the year</b>	<b>0</b>	0	<b>(268)</b>	(529)	<b>(536)</b>	(611)	<b>(805)</b>	(1,140)
<b>Funded and unfunded plans</b>								
Defined benefit obligation from funded plans	<b>22,828</b>	22,865	<b>3,650</b>	3,704	<b>1,291</b>	1,316	<b>27,769</b>	27,885
Defined benefit obligation from unfunded plans	<b>0</b>	0	<b>0</b>	0	<b>479</b>	440	<b>479</b>	440
Plan assets	<b>25,984</b>	24,614	<b>3,381</b>	3,175	<b>1,234</b>	1,144	<b>30,599</b>	28,934
<b>Surplus / (deficit)</b>	<b>3,156</b>	1,749	<b>(268)</b>	(529)	<b>(536)</b>	(611)	<b>2,351</b>	609
<b>Asset ceiling effect</b>	<b>3,156</b>	1,749	<b>0</b>	0	<b>0</b>	0	<b>3,156</b>	1,749
<b>Net defined benefit asset / (liability)</b>	<b>0</b>	0	<b>(268)</b>	(529)	<b>(536)</b>	(611)	<b>(805)</b>	(1,140)

<sup>1</sup> Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred.



## Note 26 Pension and other post-employment benefit plans (continued)

### Analysis of amounts recognized in net profit

CHF million	Swiss plan		UK plan		US and German plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended								
Current service cost	448	471	0	0	9	9	456	480
Interest expense related to defined benefit obligation	163	240	100	116	61	62	325	419
Interest income related to plan assets	(178)	(258)	(86)	(118)	(44)	(44)	(307)	(420)
Interest expense on asset ceiling effect	13	14	0	0	0	0	13	14
Administration expenses, taxes and premiums paid	10	10	0	0	4	6	14	16
Curtailments	(49)	(96)	0	0	0	0	(49)	(96)
<b>Net periodic expenses recognized in net profit</b>	<b>406</b>	<b>381</b>	<b>14</b>	<b>(2)</b>	<b>31</b>	<b>33</b>	<b>452</b>	<b>412</b>

### Analysis of amounts recognized in other comprehensive income (OCI)

CHF million	Swiss plan		UK plan		US and German plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended								
Remeasurement of defined benefit obligation	(303)	(477)	82	(922)	(80)	(125)	(301)	(1,524)
Return on plan assets excluding amounts included in interest income	1,619	824	213	312	108	2	1,939	1,139
Asset ceiling effect excluding interest expense on asset ceiling effect	(1,394)	(452)	0	0	0	0	(1,394)	(452)
<b>Total gains / (losses) recognized in other comprehensive income, before tax</b>	<b>(78)</b>	<b>(105)</b>	<b>295</b>	<b>(610)</b>	<b>28</b>	<b>(122)</b>	<b>245</b>	<b>(837)</b>

The table below provides information on the duration of the DBO and the timing for expected benefit payments.

	Swiss plan		UK plan		US and German plans <sup>1</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Duration of the defined benefit obligation (in years)</b>	<b>15.1</b>	<b>15.1</b>	<b>20.0</b>	<b>22.6</b>	<b>10.6</b>	<b>10.6</b>
<b>Maturity analysis of benefits expected to be paid</b>						
CHF million						
Benefits expected to be paid within 12 months	1,120	1,140	81	72	105	103
Benefits expected to be paid between 1 and 3 years	2,236	2,204	177	164	212	213
Benefits expected to be paid between 3 and 6 years	3,368	3,394	328	315	321	328
Benefits expected to be paid between 6 and 11 years	5,423	5,439	699	710	558	562
Benefits expected to be paid between 11 and 16 years	4,980	5,041	786	856	501	514
Benefits expected to be paid in more than 16 years	16,757	17,162	4,216	6,064	865	958

<sup>1</sup> The duration of the defined benefit obligation represents a weighted average across US and German plans.

## Note 26 Pension and other post-employment benefit plans (continued)

### Actuarial assumptions

The measurement of each pension plan's DBO considers different actuarial assumptions. Changes in those assumptions lead to volatility in the DBO. The following principal actuarial assumptions are applied:

- Discount rate: the discount rate is based on the yield of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan. Consequently, a decrease in the yield of high-quality corporate bonds increases the DBO. Conversely, an increase in the yield of high-quality corporate bonds decreases the DBO.
- Rate of salary increase: an increase in the salary of plan participants generally increases the DBO, specifically for the Swiss and German plans. For the UK plan, as the plan is closed for future service, UBS employees no longer accrue future service benefits and thus salary increases have no effect on the DBO. For the US plans, only a small percentage of the total population continues to accrue benefits for future service and therefore the effect of a salary increase on the DBO is minimal.
- Rate of pension increase: for the Swiss plan, there is no automatic indexing of pensions. Any increase would be decided by the Pension Foundation Board. For the US plans, there is also no automatic indexing of pensions. For the UK plan, pensions are automatically indexed to price inflation as per plan rules and local pension legislation. The German plans are also automatically indexed and a portion of the pensions are directly increased by price inflation. An increase in price inflation in the UK and Germany increases the respective plan's DBO.
- Rate of interest credit on retirement savings: the Swiss plan and one of the US plans have retirement saving balances that are increased annually by an interest credit rate. For these plans, an increase in the interest credit rate increases the respective plan's DBO.
- Life expectancy: for most of UBS's defined benefit pension plans, the respective plan is obligated to provide guaranteed lifetime pension benefits. The DBO for all plans is calculated using an underlying best estimate of the life expectancy of plan participants. An increase in the life expectancy of plan participants increases the plan's DBO.

The actuarial assumptions used for the pension plans are based on the economic conditions prevailing in the jurisdiction in which they are offered.

→ Refer to Note 1a item 7 for a description of the accounting policy for defined benefit pension plans

### Changes in actuarial assumptions

UBS regularly reviews the actuarial assumptions used in calculating its DBO to determine their continuing relevance.

### Swiss pension plan

In 2017, a net loss of CHF 303 million was recognized in *Other comprehensive income* (OCI) related to the remeasurement of the DBO. This was primarily due to a market-driven decrease in the discount rate, which resulted in an OCI loss of CHF 170 million, as well as experience losses of CHF 152 million, reflecting differences between the previous actuarial assumptions and what actually occurred. These effects were partially offset by market-driven changes to the assumed rate of interest credit on retirement savings, which resulted in a gain of CHF 27 million. Changes in other assumptions were not significant.

In 2016, UBS continued to enhance its methodology for estimating the discount rate by improving the construction of the yield curve from Swiss high-quality corporate bonds. Furthermore, UBS refined its approach for estimating the life expectancy, the rate of employee disability and the rate of salary increases. These changes in estimates decreased the DBO of the Swiss pension plan by CHF 319 million, of which changes in demographic assumptions decreased the DBO by CHF 659 million and changes in financial assumptions increased the DBO by CHF 339 million. However, the effect from these changes in estimates was more than offset by experience losses and market-driven changes in the discount rate, resulting in a total upward remeasurement of the Swiss plan DBO of CHF 477 million recognized in OCI.

### UK pension plan

In 2017, a net gain of CHF 82 million was recognized in OCI related to the remeasurement of the DBO for the UK plan. This was primarily driven by changes in the life expectancy assumption, which resulted in a gain of CHF 80 million. In addition, market-driven changes in the inflation rate assumption resulted in a gain of CHF 60 million and experience gains were CHF 49 million. These gains were partly offset by a market-driven decrease in the discount rate, which resulted in a loss of CHF 105 million.

In 2016, a net loss of CHF 922 million was recognized in OCI related to the remeasurement of the DBO for the UK plan, resulting from a loss of CHF 866 million due to a market-driven decrease in the discount rate and a loss of CHF 156 million from market-driven changes in the inflation rate assumption, partly offset by a gain of CHF 63 million from changes in the life expectancy assumption and an experience gain of CHF 37 million.

### US and German pension plans

In 2017, a net loss of CHF 80 million was recognized in OCI related to the remeasurement of the DBO for the US and German plans compared with a net loss of CHF 125 million in 2016. OCI losses in both years were primarily driven by market-driven decreases in discount rates.

## Note 26 Pension and other post-employment benefit plans (continued)

The tables below show the principal actuarial assumptions used in calculating the DBO at the end of the year.

### Principal actuarial assumptions used

In %	Swiss plan		UK plan		US and German plans <sup>1</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate	0.67	0.73	2.55	2.69	3.14	3.58
Rate of salary increase	1.30	1.30	0.00	0.00	2.83	2.86
Rate of pension increase	0.00	0.00	3.11	3.18	1.50	1.50
Rate of interest credit on retirement savings	0.67	0.73	0.00	0.00	2.56	1.74

<sup>1</sup> Represents weighted average assumptions across US and German plans.

### Mortality tables and life expectancies for major plans

Country	Mortality table	Life expectancy at age 65 for a male member currently			
		aged 65		aged 45	
		31.12.17	31.12.16	31.12.17	31.12.16
Switzerland	BVG 2015 G with CMI 2016 projections <sup>1</sup>	21.6	21.5	23.0	22.9
UK	S2PA with CMI 2016 projections <sup>2</sup>	23.4	23.7	24.6	25.0
USA	RP2014 WCHA with MP2017 projection scale <sup>3</sup>	22.8	22.9	24.4	24.4
Germany	Dr. K. Heubeck 2005 G	20.3	20.1	22.9	22.8

Country	Mortality table	Life expectancy at age 65 for a female member currently			
		aged 65		aged 45	
		31.12.17	31.12.16	31.12.17	31.12.16
Switzerland	BVG 2015 G with CMI 2016 projections <sup>1</sup>	23.4	23.4	24.9	24.9
UK	S2PA with CMI 2016 projections <sup>2</sup>	25.2	25.6	26.5	27.4
USA	RP2014 WCHA with MP2017 projection scale <sup>3</sup>	24.4	24.5	26.0	26.1
Germany	Dr. K. Heubeck 2005 G	24.3	24.2	26.8	26.7

<sup>1</sup> In 2016, the mortality table BVG 2015 G with proposed CMI 2016 was used. <sup>2</sup> In 2016, the mortality table S2PA with CMI 2015 projections was used. <sup>3</sup> In 2016, the mortality table RP2014 WCHA with MP2016 projection scale was used.

### Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption, showing how the DBO would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen

circumstances may arise, which could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below on the DBO as the sensitivities may not be linear.

### Sensitivity analysis of significant actuarial assumptions<sup>1</sup>

Increase / (decrease) in defined benefit obligation	Swiss plan		UK plan		US and German plans	
CHF million	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Discount rate</b>						
Increase by 50 basis points	(1,432)	(1,435)	(341)	(388)	(88)	(86)
Decrease by 50 basis points	1,627	1,630	391	452	96	94
<b>Rate of salary increase</b>						
Increase by 50 basis points	84	86	-2	-2	1	1
Decrease by 50 basis points	(80)	(79)	-2	-2	(1)	(1)
<b>Rate of pension increase</b>						
Increase by 50 basis points	1,181	1,178	370	435	7	6
Decrease by 50 basis points	-3	-3	(327)	(377)	(6)	(6)
<b>Rate of interest credit on retirement savings</b>						
Increase by 50 basis points	260	264	-4	-4	9	9
Decrease by 50 basis points	(247)	(250)	-4	-4	(9)	(8)
<b>Life expectancy</b>						
Increase in longevity by one additional year	807	796	139	136	47	44

<sup>1</sup> The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded. <sup>2</sup> As the plan is closed for future service, a change in assumption is not applicable. <sup>3</sup> As the assumed rate of pension increase was 0% as of 31 December 2017 and as of 31 December 2016, a downward change in assumption is not applicable. <sup>4</sup> As the UK plan does not provide interest credits on retirement savings, a change in assumption is not applicable.

## Note 26 Pension and other post-employment benefit plans (continued)

### Fair value of plan assets

The tables below provide information on the composition and fair value of plan assets of the Swiss, the UK and the US pension plans.

#### Composition and fair value of plan assets

##### Swiss plan

	31.12.17			Plan asset allocation %	31.12.16			Plan asset allocation %
	Fair value				Fair value			
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
<b>Cash and cash equivalents</b>	117	0	117	0	869	0	869	4
<b>Real estate / property</b>								
Domestic	0	2,787	2,787	11	0	2,689	2,689	11
<b>Investment funds</b>								
Equity								
Domestic	650	0	650	3	938	0	938	4
Foreign	7,317	1,298	8,615	33	6,558	1,170	7,728	31
Bonds <sup>1</sup>								
Domestic, AAA to BBB-	2,221	0	2,221	9	2,222	0	2,222	9
Foreign, AAA to BBB-	6,214	0	6,214	24	5,877	0	5,877	24
Foreign, below BBB-	563	0	563	2	1,176	0	1,176	5
Real estate								
Foreign	0	23	23	0	0	42	42	0
Other	839	3,942	4,781	18	283	2,776	3,059	12
<b>Other investments</b>	0	12	12	0	0	15	15	0
<b>Total fair value of plan assets</b>	<b>17,922</b>	<b>8,061</b>	<b>25,984</b>	<b>100</b>	<b>17,923</b>	<b>6,691</b>	<b>24,614</b>	<b>100</b>
			31.12.17				31.12.16	
<b>Total fair value of plan assets</b>			<b>25,984</b>				<b>24,614</b>	
<i>of which:<sup>2</sup></i>								
Bank accounts at UBS			117				432	
UBS debt instruments			3				5	
UBS shares			33				47	
Securities lent to UBS <sup>3</sup>			1,979				1,855	
Property occupied by UBS			83				83	
Derivative financial instruments, counterparty UBS <sup>3</sup>			23				(220)	

<sup>1</sup> The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB- and below BBB- represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification. <sup>2</sup> Bank accounts at UBS encompass accounts in the name of the Swiss pension fund. The other positions disclosed in the table encompass both direct investments in UBS instruments and indirect investments, i.e. those made through funds that the pension fund invests in. <sup>3</sup> Securities lent to UBS and derivative financial instruments are presented gross of any collateral. Securities lent to UBS were fully covered by collateral as of 31 December 2017 and 31 December 2016. Net of collateral, derivative financial instruments amounted to CHF 11 million as of 31 December 2017 (31 December 2016: CHF 76 million).

## Note 26 Pension and other post-employment benefit plans (continued)

### Composition and fair value of plan assets (continued)

#### UK plan

	31.12.17			Plan asset allocation %	31.12.16			Plan asset allocation %
	Fair value				Fair value			
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
<b>Cash and cash equivalents</b>	<b>159</b>	<b>0</b>	<b>159</b>	<b>5</b>	133	0	133	4
<b>Bonds<sup>1</sup></b>								
Domestic, AAA to BBB–	1,666	0	1,666	49	1,131	0	1,131	36
Domestic, below BBB–	1	0	1	0	1	0	1	0
<b>Investment funds</b>								
Equity								
Domestic	31	0	31	1	39	0	39	1
Foreign	1,020	0	1,020	30	984	0	984	31
Bonds <sup>1</sup>								
Domestic, AAA to BBB–	625	81	706	21	500	28	528	17
Domestic, below BBB–	21	0	21	1	23	0	23	1
Foreign, AAA to BBB–	143	0	143	4	245	0	245	8
Foreign, below BBB–	56	0	56	2	39	0	39	1
Real estate								
Domestic	100	27	128	4	39	72	111	4
Other	(4)	5	1	0	(35)	111	76	2
<b>Other investments<sup>2</sup></b>	<b>(560)</b>	<b>11</b>	<b>(549)</b>	<b>(16)</b>	(144)	10	(134)	(4)
<b>Total fair value of plan assets</b>	<b>3,257</b>	<b>124</b>	<b>3,381</b>	<b>100</b>	2,955	221	3,175	100

<sup>1</sup> The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification. <sup>2</sup> Mainly relates to repurchase arrangements on UK treasury bonds.

## Note 26 Pension and other post-employment benefit plans (continued)

### Composition and fair value of plan assets (continued)

#### US plans

	31.12.17			Weighted average plan asset allocation %	31.12.16			Weighted average plan asset allocation %
	Fair value				Fair value			
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
<b>Cash and cash equivalents</b>	74	0	74	6	75	0	75	7
<b>Bonds<sup>1</sup></b>								
Domestic, AAA to BBB–	195	0	195	16	158	0	158	14
Domestic, below BBB–	10	0	10	1	13	0	13	1
Foreign, AAA to BBB–	44	0	44	4	42	0	42	4
Foreign, below BBB–	1	0	1	0	1	0	1	0
<b>Investment funds</b>								
Equity								
Domestic	291	0	291	24	264	0	264	23
Foreign	270	0	270	22	248	0	248	22
Bonds <sup>1</sup>								
Domestic, AAA to BBB–	210	0	210	17	218	0	218	19
Domestic, below BBB–	19	0	19	2	18	0	18	2
Foreign, AAA to BBB–	46	0	46	4	42	0	42	4
Foreign, below BBB–	5	0	5	0	5	0	5	0
Real estate								
Domestic	0	12	12	1	0	11	11	1
Other	21	0	21	2	19	0	19	2
<b>Insurance contracts</b>	0	17	17	1	0	18	18	2
<b>Asset-backed securities</b>	15	0	15	1	8	0	8	1
<b>Other investments</b>	4	0	4	0	3	0	3	0
<b>Total fair value of plan assets</b>	<b>1,204</b>	<b>30</b>	<b>1,234</b>	<b>100</b>	<b>1,115</b>	<b>29</b>	<b>1,144</b>	<b>100</b>

<sup>1</sup> The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification.

## Note 26 Pension and other post-employment benefit plans (continued)

### b) Post-employment medical insurance plans

In the US and the UK, UBS offers post-employment medical insurance benefits that contribute to the health care coverage of certain employees and their beneficiaries after retirement. The UK post-employment medical insurance plan is closed to new entrants.

These plans are not prefunded. In the US, the retirees also contribute to the cost of the post-employment medical benefits.

The benefits expected to be paid by UBS to the post-employment medical insurance plans in 2018 are estimated to be CHF 5 million.

The table below provides an analysis of the movement in the net asset / liability recognized on the balance sheet for post-employment medical plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

#### Post-employment medical insurance plans

CHF million	UK plan		US plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended						
Post-employment benefit obligation at the beginning of the year	26	25	65	59	91	84
Current service cost	0	0	0	0	0	0
Interest expense	1	1	2	3	3	3
Plan participant contributions	0	0	3	2	3	2
Remeasurements	(1)	6	0	7	(1)	13
<i>of which: actuarial (gains) / losses due to changes in demographic assumptions</i>	0	1	0	(1)	(1)	0
<i>of which: actuarial (gains) / losses due to changes in financial assumptions</i>	(1)	5	2	1	2	6
<i>of which: experience (gains) / losses<sup>1</sup></i>	0	0	(2)	6	(2)	6
Benefit payments <sup>2</sup>	(1)	(1)	(7)	(7)	(9)	(8)
Foreign currency translation	1	(4)	(3)	1	(1)	(3)
<b>Post-employment benefit obligation at the end of the year</b>	<b>26</b>	<b>26</b>	<b>59</b>	<b>65</b>	<b>86</b>	<b>91</b>
<i>of which: amounts owed to active members</i>	6	6	0	0	6	6
<i>of which: amounts owed to deferred members</i>	0	0	0	0	0	0
<i>of which: amounts owed to retirees</i>	20	21	59	65	79	86
Fair value of plan assets at the end of the year	0	0	0	0	0	0
<b>Net post-employment benefit asset / (liability)</b>	<b>(26)</b>	<b>(26)</b>	<b>(59)</b>	<b>(65)</b>	<b>(86)</b>	<b>(91)</b>

#### Analysis of amounts recognized in net profit

Current service cost	0	0	0	0	0	0
Interest expense related to post-employment benefit obligation	1	1	2	3	3	3
<b>Net periodic expenses</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>

#### Analysis of amounts recognized in other comprehensive income (OCI)

Remeasurement of post-employment benefit obligation	1	(6)	0	(7)	1	(13)
<b>Total gains / (losses) recognized in other comprehensive income, before tax</b>	<b>1</b>	<b>(6)</b>	<b>0</b>	<b>(7)</b>	<b>1</b>	<b>(13)</b>

<sup>1</sup> Experience (gains) / losses are a component of actuarial remeasurements of the post-employment benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. <sup>2</sup> Benefit payments are funded by employer contributions and plan participant contributions.

## Note 26 Pension and other post-employment benefit plans (continued)

### Actuarial assumptions

The measurement of each medical insurance plan's post-employment benefit obligation considers different actuarial assumptions. Changes in assumptions lead to volatility in the post-employment benefit obligation. The following principal actuarial assumptions are applied:

- Discount rate: discount rates used for post-employment medical insurance plans are the same as those used for defined benefit pension plans. A decrease in the yield of high-quality corporate bonds increases the post-employment benefit obligation. Conversely, an increase in the yield of high-quality corporate bonds decreases the post-employment benefit obligation.

- Average health care cost trend rate: an increase in health care costs generally increases the post-employment benefit obligation.
- Life expectancy: as some plan participants have lifetime benefits under these plans, an increase in life expectancy increases the post-employment benefit obligation.

UBS regularly reviews the actuarial assumptions used in calculating its post-employment benefit obligations to determine their continuing relevance. Principal actuarial assumptions used to determine post-employment benefit obligations at the end of the year were:

### Principal actuarial assumptions used<sup>1</sup>

In %	UK plan		US plans <sup>2</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate	2.55	2.69	3.54	3.97
Average health care cost trend rate – initial	5.10	5.10	7.99	7.03
Average health care cost trend rate – ultimate	5.10	5.10	4.50	4.50

<sup>1</sup> The assumptions for life expectancies are provided within Note 26a. <sup>2</sup> Represents weighted average assumptions across US plans.

### Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption showing how the post-employment benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen circumstances may arise, which

could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below on the post-employment benefit obligation, as the sensitivities may not be linear.

### Sensitivity analysis of significant actuarial assumptions<sup>1</sup>

Increase / (decrease) in post-employment benefit obligation CHF million	UK plan		US plans	
	31.12.17	31.12.16	31.12.17	31.12.16
<b>Discount rate</b>				
Increase by 50 basis points	(2)	(2)	(3)	(3)
Decrease by 50 basis points	2	2	3	3
<b>Average health care cost trend rate</b>				
Increase by 100 basis points	4	4	1	2
Decrease by 100 basis points	(3)	(3)	(1)	(1)
<b>Life expectancy</b>				
Increase in longevity by one additional year	2	2	4	5

<sup>1</sup> The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded.

### c) Defined contribution plans

UBS sponsors a number of defined contribution plans in locations outside Switzerland. The locations with significant defined contribution plans are the US and the UK. Certain plans allow employees to make contributions and earn matching or other contributions from UBS. Employer contributions to defined

contribution plans are recognized as an expense, which, for the years ended 31 December 2017, 2016 and 2015, amounted to CHF 239 million, CHF 236 million and CHF 239 million, respectively.



## Note 26 Pension and other post-employment benefit plans (continued)

### d) Related-party disclosure

UBS is the principal provider of banking services for the pension fund of UBS in Switzerland. In this capacity, UBS is engaged to execute most of the pension fund's banking activities. These activities can include, but are not limited to, trading, securities lending and borrowing and derivative transactions. The non-Swiss UBS pension funds do not have a similar banking relationship with UBS.

Also, UBS leases certain properties that are owned by the Swiss pension fund. As of 31 December 2017, the minimum commitment toward the Swiss pension fund under the related

leases was approximately CHF 5 million (31 December 2016: CHF 11 million).

→ Refer to the "Composition and fair value of plan assets" table in Note 26a for more information on fair value of investments in UBS instruments held by the Swiss pension fund

The following amounts have been received or paid by UBS from and to the pension and other post-employment benefit plans located in Switzerland, the UK and the US in respect of these banking activities and arrangements.

#### Related-party disclosure

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Received by UBS</b>			
Fees	36	36	33
<b>Paid by UBS</b>			
Rent	4	4	5
Dividends, capital repayments and interest	9	15	13

The transaction volumes in UBS shares and UBS debt instruments and the balances of UBS shares held as of 31 December were:

#### Transaction volumes – UBS shares and UBS debt instruments

	For the year ended	
	31.12.17	31.12.16
<b>Financial instruments bought by pension funds</b>		
UBS shares (in thousands of shares)	905	2,427
UBS debt instruments (par values, CHF million)	2	0
<b>Financial instruments sold by pension funds or matured</b>		
UBS shares (in thousands of shares)	2,897	1,618
UBS debt instruments (par values, CHF million)	4	0

#### UBS shares held by pension and other post-employment benefit plans

	31.12.17	31.12.16
Number of shares (in thousands of shares)	16,370	18,363
Fair value (CHF million)	293	293

## Note 27 Employee benefits: variable compensation

### a) Plans offered

The Group has several share-based and other compensation plans that align the interests of Group Executive Board (GEB) members, Key Risk Takers (KRTs) and other employees with the interests of shareholders and other investors. These compensation plans are also designed to meet regulatory requirements. Section a) of this Note provides a description of the most significant compensation plans.

→ Refer to Note 1a item 6 for a description of the accounting policy related to share-based and other compensation plans

#### Mandatory deferred compensation plans

##### Equity Ownership Plan (EOP)

The EOP is a mandatory deferred compensation plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive at least 60% of their deferred performance award under the EOP in notional shares.

EOP awards granted to GEB members and certain other employees only vest if both Group and business division performance conditions are met. Group performance is measured based on the average adjusted return on tangible equity (RoTE) excluding deferred tax assets over the performance period. Business division performance is measured on the basis of the business division's average adjusted return on attributed equity (RoAE). For Corporate Center employees, it is measured on the basis of the average operating businesses RoAE.

Certain awards, such as replacement awards issued outside the normal performance year cycle, may take the form of deferred cash under the EOP plan rules.

Notional shares represent a promise to receive UBS shares at vesting and do not carry voting rights during the vesting period. Notional shares granted before February 2014 have no rights to dividends, whereas awards granted since February 2014 carry a dividend equivalent that may be paid in notional shares or cash and that vests on the same terms and conditions as the awards. However, awards that have been granted in February 2018 for the performance year 2017 to individuals who are deemed to be Material Risk Takers (MRTs) based on regulatory guidance in the EU do not carry such a dividend equivalent. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is not permitted for legal or tax reasons. EOP awards generally vest in equal installments after two and three years following grant (for GEB members, generally after three, four and five years). The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

##### Deferred Contingent Capital Plan (DCCP)

The DCCP is a mandatory deferred compensation plan for all employees with total compensation greater than CHF / USD 300,000. DCCP awards granted up to January 2015 represent a right to receive a cash payment at vesting. For awards granted since February 2015, DCCP takes the form of notional additional tier 1 (AT1) capital instruments, which can be settled in the form of either a cash payment or a perpetual, marketable AT1 capital instrument, at the discretion of UBS. Awards vest in full after five years and up to seven years for certain employees subject to specific regulation in the UK unless there is a trigger event.

Awards are written down if the Group's common equity tier 1 (CET1) capital ratio falls below 10% for GEB members and below 7% for all other employees. Awards are also forfeited if a viability event occurs, that is, if FINMA notifies the firm in writing that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if the firm receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. As an additional performance condition, GEB members forfeit 20% of their award for each loss-making year during the vesting period.

For awards granted up to January 2015, interest on the awards is paid annually, provided that UBS achieved an adjusted profit before tax in the preceding year. For awards granted since February 2015, interest payments are discretionary. Awards granted to MRTs since February 2018 are not eligible for interest payments. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

In 2017, UBS modified the terms of the majority of DCCP awards that were granted for the performance years 2012 and 2013 by removing the service period requirement. This resulted in a CHF 36 million expense in 2017, of which CHF 25 million related to the Investment Bank.

##### Asset Management EOP

In order to align deferred compensation of certain Asset Management employees with the performance of the investment funds they manage, awards are granted to such employees in the form of cash-settled notional investment funds. The amount delivered depends on the value of the underlying investment funds at the time of vesting. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

## Note 27 Employee benefits: variable compensation (continued)

### Wealth Management Americas financial advisor compensation

In line with market practice for US wealth management businesses, the compensation for financial advisors in Wealth Management Americas is comprised of production payout and deferred compensation awards. Production payout, paid monthly in the form of non-deferred cash payments, is primarily based on compensable revenue.

Financial advisors may also qualify for deferred compensation awards, which vest over various time periods of up to 10 years. Production payout rates and deferred compensation awards may be reduced for, among other things, errors, negligence or carelessness, or a failure to comply with the firm's rules, standards, practices and policies or applicable laws and regulations.

### Strategic objective awards

Strategic objective awards are deferred compensation awards based on strategic performance measures, including production, length of service with the firm and net new business. These awards are granted in the form of both deferred share-based and deferred cash-based awards with a vesting period of up to six years.

Through performance year 2016, strategic objective awards were partly granted under the PartnerPlus deferred cash plan. In addition to such granted awards (UBS company contributions), participants were also allowed to voluntarily contribute additional amounts otherwise payable as production payout up to a certain percentage, which vest upon contribution. Company contributions and voluntary contributions are credited with interest in accordance with the terms of the plan. Rather than being credited with interest, a participant may elect to have voluntary contributions, along with vested company contributions, credited with notional earnings based on the performance of various mutual funds. Company contributions and interest on both company and voluntary contributions ratably vest in 20% installments six to ten years following grant date. Company contributions and interest on notional earnings on both company and voluntary contributions are forfeitable under certain circumstances.

### GrowthPlus

GrowthPlus is a compensation plan for selected financial advisors whose revenue production and length of service exceed defined thresholds from 2010 through 2017. Awards were granted in 2010, 2011, 2015 and early 2018. The awards are distributed over seven years, with the exception of 2018 awards, which will be distributed over five years.

### Other compensation plans

#### Equity Plus Plan (Equity Plus)

Equity Plus is a voluntary share-based compensation plan that provides eligible employees with the opportunity to purchase UBS shares at market value and receive one notional share for every three shares purchased, up to a maximum annual limit. Share purchases may be made annually from the performance award and / or monthly through deductions from salary. If the shares purchased are held until three years from the start of the associated plan year and, in general, if the employee remains in employment, the notional shares vest. For notional shares granted since April 2014, employees are entitled to receive a dividend equivalent, which may be paid in notional shares and / or cash.

#### Role-based allowances (RBAs)

Certain employees of legal entities regulated in the EU may receive an RBA in addition to their base salary. This allowance reflects the market value of a specific role and is only paid as long as the employee is within such a role. RBAs are offered in line with market practice and are generally paid in cash. In the UK, RBAs are awarded in cash and, above a certain threshold, in blocked UBS shares. Such shares will be unblocked in equal installments after two and three years. The compensation expense is recognized in the year of grant.

## Note 27 Employee benefits: variable compensation (continued)

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### Discontinued deferred compensation plans

#### Senior Executive Equity Ownership Plan (SEEOP)

Up to February 2012, GEB members and selected senior executives received a portion of their mandatory deferral in UBS shares or notional shares, which vested in equal installments over a five-year vesting period and were forfeitable if certain conditions had not been met. The employee's business division or the Group as a whole had to be profitable in the financial year preceding scheduled vesting. Awards granted under SEEOP were settled by delivering UBS shares at vesting. No SEEOP awards have been granted since 2012.

#### Senior Executive Stock Option Plan (SESOP)

Up to February 2008, GEB members and selected senior executives were granted UBS options with a strike price set at 110% of the fair market value of a UBS share on the grant date. These awards vested in full following a three-year vesting period and generally expire ten years from the grant date. No SESOP awards have been granted since 2008.

#### Long-Term Deferred Retention Senior Incentive Scheme (LTDRSIS)

Awards under the LTDRSIS were granted to employees in Australia up to and including 2014 and represented a profit share amount based on the profitability of the Australian business. Awards vested after three years and included an arrangement that allowed for unpaid installments to be reduced if the business recorded a loss for the calendar year preceding vesting. The awards were generally forfeitable upon voluntary termination of employment with UBS.

#### Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP)

Until 2009, certain key and high-potential employees were granted discretionary share-settled stock appreciation rights (SARs) or options on UBS shares with a strike price not less than the market value of a UBS share on the date of grant. A SAR gives employees the right to receive a number of UBS shares equal to the value of any market price increase of a UBS share between the grant date and the exercise date. One option entitles the holder to acquire one registered UBS share at the option's strike price. SARs and options are settled by delivering UBS shares, except in jurisdictions where this is not permitted for legal reasons. No options or SARs awards have been granted since 2009.

### Share delivery obligations

Share delivery obligations related to employee share-based compensation awards were 166 million shares as of 31 December 2017, unchanged from 31 December 2016. Share delivery obligations are calculated on the basis of unvested notional share awards, options and stock appreciation rights, taking applicable performance conditions into account.

As of 31 December 2017, UBS held 132 million treasury shares (31 December 2016: 138 million) that were available to satisfy share delivery obligations. Treasury shares held are delivered to employees at exercise or vesting. However, share delivery obligations related to certain options and stock appreciation rights can also be satisfied by shares issued out of conditional capital. As of 31 December 2017, the number of UBS Group AG shares that could have been issued out of conditional capital for this purpose was 128 million (31 December 2016: 130 million).

## Note 27 Employee benefits: variable compensation (continued)

### b) Effect on the income statement

#### Effect on the income statement for the financial year and future periods

The table below provides information on compensation expenses related to total variable compensation, including financial advisor compensation in Wealth Management Americas, that were recognized in the financial year ended 31 December 2017, as well as expenses that were deferred and will be recognized in the

income statement for 2018 and later. The majority of expenses deferred to 2018 and later that are related to the performance year 2017 relates to awards granted in February 2018. The total compensation expense for unvested share-based awards granted up to 31 December 2017 will be recognized in future periods over a weighted average period of 2.1 years.

#### Variable compensation including Wealth Management Americas financial advisor compensation

CHF million	Expenses recognized in 2017			Expenses deferred to 2018 and later		
	Related to the performance year 2017	Related to prior performance years	Total	Related to the performance year 2017	Related to prior performance years	Total
Non-deferred cash	2,047	(25)	2,022	0	0	0
Deferred compensation awards	392	676	1,068	590	679	1,270
<i>of which: Equity Ownership Plan</i>	235	337	572	323	284	607
<i>of which: Deferred Contingent Capital Plan</i>	132	304	437	241	367	607
<i>of which: Asset Management EOP</i>	25	31	55	27	26	52
<i>of which: Other performance awards</i>	0	4	4	0	3	3
<b>Total variable compensation – performance awards</b>	<b>2,439</b>	<b>651</b>	<b>3,090</b>	<b>590</b>	<b>679</b>	<b>1,270</b>
Replacement payments	13	58	71	84	42	126
Forfeiture credits	0	(105)	(105)	0	0	0
Severance payments	111	0	111	0	0	0
Retention plan and other payments	25	37	62	30	32	61
Deferred Contingent Capital Plan: interest expense	0	109	109	78	216	294
<b>Total variable compensation – other</b>	<b>148</b>	<b>99</b>	<b>248</b>	<b>191</b>	<b>291</b>	<b>482</b>
Financial advisor compensation	2,995	252	3,247	153	779	932
<i>of which: non-deferred cash</i>	2,836	0	2,836	0	0	0
<i>of which: deferred share-based awards</i>	56	44	100	69	117	186
<i>of which: deferred cash-based awards</i>	102	209	311	84	662	746
Compensation commitments with recruited financial advisors <sup>1</sup>	30	710	740	360	2,009	2,369
<b>Total Wealth Management Americas: Financial advisor compensation</b>	<b>3,025</b>	<b>962</b>	<b>3,986</b>	<b>513</b>	<b>2,788</b>	<b>3,300</b>
<b>Total variable compensation including WMA FA compensation</b>	<b>5,613</b>	<b>1,712</b>	<b>7,324<sup>2</sup></b>	<b>1,294</b>	<b>3,758</b>	<b>5,052</b>

<sup>1</sup> Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. <sup>2</sup> Includes CHF 698 million in expenses related to share-based compensation (performance awards: CHF 572 million; other variable compensation: CHF 26 million; Wealth Management Americas financial advisor compensation: CHF 100 million). A further CHF 99 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 25 million, related to role-based allowances; Social security: CHF 50 million; Other personnel expenses: CHF 25 million, related to the Equity Plus Plan). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 721 million.

## Note 27 Employee benefits: variable compensation (continued)

### Variable compensation including Wealth Management Americas financial advisor compensation

CHF million	Expenses recognized in 2016			Expenses deferred to 2017 and later		
	Related to the performance year 2016	Related to prior performance years	Total	Related to the performance year 2016	Related to prior performance years	Total
Non-deferred cash	1,817	(42)	1,775	0	0	0
Deferred compensation awards	373	825	1,198	671	856	1,527
<i>of which: Equity Ownership Plan</i>	214	485	699	372	356	727
<i>of which: Deferred Contingent Capital Plan</i>	133	295	428	266	468	735
<i>of which: Asset Management EOP</i>	26	39	65	34	27	60
<i>of which: Other performance awards</i>	0	6	6	0	5	5
<b>Total variable compensation – performance awards</b>	<b>2,191</b>	<b>781</b>	<b>2,972</b>	<b>671</b>	<b>856</b>	<b>1,527</b>
Replacement payments	24	62	86	40	31	71
Forfeiture credits	0	(73)	(73)	0	0	0
Severance payments	217	0	217	0	0	0
Retention plan and other payments	25	49	74	24	27	50
Deferred Contingent Capital Plan: interest expense	0	113	113	98	243	341
<b>Total variable compensation – other</b>	<b>266</b>	<b>151</b>	<b>418</b>	<b>162</b>	<b>301</b>	<b>463</b>
Financial advisor compensation	2,651	247	2,898	196	893	1,089
<i>of which: non-deferred cash</i>	2,506	0	2,506	0	0	0
<i>of which: deferred share-based awards</i>	33	48	81	57	120	177
<i>of which: deferred cash-based awards</i>	112	199	311	139	773	912
Compensation commitments with recruited financial advisors <sup>1</sup>	43	756	799	607	2,120	2,727
<b>Total Wealth Management Americas: Financial advisor compensation</b>	<b>2,695</b>	<b>1,002</b>	<b>3,697</b>	<b>804</b>	<b>3,013</b>	<b>3,816</b>
<b>Total variable compensation including WMA FA compensation</b>	<b>5,152</b>	<b>1,935</b>	<b>7,087<sup>2</sup></b>	<b>1,637</b>	<b>4,169</b>	<b>5,806</b>

<sup>1</sup> Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. <sup>2</sup> Includes CHF 820 million in expenses related to share-based compensation (performance awards: CHF 699 million; other variable compensation: CHF 40 million; Wealth Management Americas financial advisor compensation: CHF 81 million). A further CHF 90 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 39 million, related to role-based allowances; Social security: CHF 27 million; Other personnel expenses: CHF 24 million, related to the Equity Plus Plan). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 861 million.

## Note 27 Employee benefits: variable compensation (continued)

### Variable compensation including Wealth Management Americas financial advisor compensation

CHF million	Expenses recognized in 2015			Expenses deferred to 2016 and later		
	Related to the performance year 2015	Related to prior performance years	Total	Related to the performance year 2015	Related to prior performance years	Total
Non-deferred cash	2,073	(94)	1,980	0	0	0
Deferred compensation awards	461	769	1,230	900	822	1,722
<i>of which: Equity Ownership Plan</i>	261	461	722	524	338	861
<i>of which: Deferred Contingent Capital Plan</i>	172	258	429	343	446	789
<i>of which: Asset Management EOP</i>	28	38	67	34	35	69
<i>of which: Other performance awards</i>	0	12	12	0	3	3
<b>Total variable compensation – performance awards</b>	<b>2,535</b>	<b>675</b>	<b>3,210</b>	<b>900</b>	<b>822</b>	<b>1,722</b>
Replacement payments	11	65	76	72	41	114
Forfeiture credits	0	(86)	(86)	0	0	0
Severance payments	157	0	157	0	0	0
Retention plan and other payments	15	102	117	15	52	67
Deferred Contingent Capital Plan: interest expense	0	81	81	160	200	360
<b>Total variable compensation – other</b>	<b>184</b>	<b>162</b>	<b>346</b>	<b>248</b>	<b>293</b>	<b>541</b>
Financial advisor compensation	2,629	187	2,816	776	571	1,347
<i>of which: non-deferred cash</i>	2,460	0	2,460	0	0	0
<i>of which: deferred share-based awards</i>	37	45	82	66	115	182
<i>of which: deferred cash-based awards</i>	132	142	275	710	456	1,166
Compensation commitments with recruited financial advisors <sup>1</sup>	43	692	735	940	1,899	2,839
<b>Total Wealth Management Americas: Financial advisor compensation</b>	<b>2,673</b>	<b>879</b>	<b>3,552</b>	<b>1,716</b>	<b>2,470</b>	<b>4,186</b>
<b>Total variable compensation including WMA FA compensation</b>	<b>5,391</b>	<b>1,716</b>	<b>7,108<sup>2</sup></b>	<b>2,864</b>	<b>3,585</b>	<b>6,449</b>

<sup>1</sup> Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. <sup>2</sup> Includes CHF 858 million in expenses related to share-based compensation (performance awards: CHF 722 million; other variable compensation: CHF 54 million; Wealth Management Americas financial advisor compensation: CHF 82 million). A further CHF 108 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 26 million, related to role-based allowances; Social security: CHF 61 million; Other personnel expenses: CHF 21 million, related to the Equity Plus Plan). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 858 million.

## Note 27 Employee benefits: variable compensation (continued)

### c) Outstanding share-based compensation awards

#### Share and performance share awards

Movements in outstanding share-based awards under the EOP plan during 2017 and 2016 are provided in the table below.

#### Movements in outstanding share and performance share awards granted under the EOP

	Number of shares 2017	Weighted average grant date fair value (CHF)	Number of shares 2016	Weighted average grant date fair value (CHF)
Outstanding, at the beginning of the year	165,626,088	15	144,185,104	17
Shares awarded during the year	63,872,651	14	82,473,059	14
Distributions during the year	(58,756,089)	16	(56,018,881)	16
Forfeited during the year	(7,906,936)	15	(5,013,194)	15
Outstanding, at the end of the year	162,835,713	15	165,626,088	15
<i>of which: shares vested for accounting purposes</i>	<i>74,883,139</i>		<i>73,913,272</i>	

The total carrying amount of the liability related to cash-settled share-based awards as of 31 December 2017 and 31 December 2016 was CHF 55 million and CHF 50 million, respectively.

#### Option awards

No option awards have been granted since 2009. Movements in outstanding option awards during 2017 and 2016 are provided in the table below.

#### Movements in outstanding option awards

	Number of options 2017	Weighted average exercise price (CHF)	Number of options 2016	Weighted average exercise price (CHF)
Outstanding, at the beginning of the year	55,913,291	39	80,848,217	45
Exercised during the year <sup>1</sup>	(1,632,319)	12	(624,554)	12
Forfeited during the year	(38,995)	27	(51,065)	43
Expired unexercised	(21,658,809)	61	(24,259,307)	61
Outstanding, at the end of the year	32,583,168	25	55,913,291	39
Exercisable, at the end of the year	32,583,168	25	55,913,291	39

<sup>1</sup> The weighted average share price upon option exercise was CHF 16.73 in 2017 (2016: CHF 15.69), resulting in an intrinsic value of CHF 8 million of options exercised during 2017 (2016: CHF 3 million).

The table below provides additional information about options outstanding as of 31 December 2017.

Range of exercise prices	Options outstanding			Weighted average remaining contractual term (years)
	Number of options outstanding	Weighted average exercise price (CHF)	Aggregate intrinsic value (CHF million)	
<b>CHF</b>				
10.21–15.00	6,139,267	11.37	40.3	1.1
15.01–25.00	6,729,572	19.12	5.3	1.2
25.01–35.00	18,565,697	31.43	0.0	0.2
35.01–45.00	1,146,032	35.67	0.0	0.2
45.01–55.00	2,600	46.02	0.0	0.0
<b>10.21–55.00</b>	<b>32,583,168</b>		<b>45.7</b>	



## Note 27 Employee benefits: variable compensation (continued)

### SAR awards

No SAR awards have been granted since 2009. Movements in outstanding SAR awards during 2017 and 2016 are provided in the table below.

#### Movements in outstanding SAR awards

	Number of SARs 2017	Weighted average exercise price (CHF)	Number of SARs 2016	Weighted average exercise price (CHF)
Outstanding, at the beginning of the year	10,807,315	12	12,519,765	12
Exercised during the year <sup>1</sup>	(2,212,700)	11	(1,579,449)	11
Forfeited during the year	(23,000)	11	(6,000)	11
Expired unexercised	(58,200)	13	(127,001)	12
Outstanding, at the end of the year	8,513,415	12	10,807,315	12
Exercisable, at the end of the year	8,513,415	12	10,807,315	12

<sup>1</sup> The weighted average share price upon exercise of SARs was CHF 16.70 in 2017 (2016: CHF 15.36), resulting in an intrinsic value of CHF 12 million of SARs exercised during 2017 (2016: CHF 6 million).

The table below provides additional information about SARs outstanding as of 31 December 2017.

Range of exercise prices	SARs outstanding			Weighted average remaining contractual term (years)
	Number of SARs outstanding	Weighted average exercise price (CHF)	Aggregate intrinsic value (CHF million)	
<b>CHF</b>				
9.35–12.50	8,174,915	11.34	54.0	1.1
12.51–15.00	2,500	14.85	0.0	1.4
15.01–17.50	42,000	16.80	0.0	1.4
17.51–20.00	294,000	19.25	0.0	1.7
<b>9.35–20.00</b>	<b>8,513,415</b>		<b>54.0</b>	

### d) Valuation

#### UBS share awards

UBS measures compensation expense based on the average market price of the UBS share on the grant date as quoted on the SIX Swiss Exchange, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable. The fair value of the share awards subject to post-vesting sale and hedge restrictions is discounted on the basis of the duration of the post-vesting restriction and is referenced to the cost of purchasing an at-the-money European put option for the term of the transfer restriction. The weighted average discount for share and performance share awards granted during 2017 was approximately 20.2% (2016: 18.1%) of the market price of the UBS share. The grant date fair value of notional shares without dividend entitlements also includes a deduction for the present value of future expected dividends to be paid between the grant date and distribution.

#### UBS options and SARs awards

The fair values of options and SARs have been determined using a standard closed-formula option valuation model. The expected term of each instrument is calculated on the basis of historical employee exercise behavior patterns, taking into account the share price, strike price, vesting period and the contractual life of the instrument. The term structure of volatility is derived from the implied volatilities of traded options on UBS shares in combination with the observed long-term historical share price volatility. Expected future dividends are derived from traded UBS options or from the historical dividend pattern.

## Note 28 Interests in subsidiaries and other entities

### a) Interests in subsidiaries

UBS defines its significant subsidiaries as those entities that, either individually or in aggregate, contribute significantly to the Group's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to the Group's total assets and profit or loss before tax, in accordance with the requirements set by IFRS 12, Swiss regulations and the rules of the US Securities and Exchange Commission (SEC).

#### Individually significant subsidiaries

The two tables below list the Group's individually significant subsidiaries as of 31 December 2017. Unless otherwise stated,

the subsidiaries listed below have share capital consisting solely of ordinary shares that are held fully by the Group, and the proportion of ownership interest held is equal to the voting rights held by the Group.

The country where the respective registered office is located is also the principal place of business. UBS AG operates through a global network of branches and a significant proportion of its business activity is conducted outside Switzerland in the UK, US, Singapore, Hong Kong and other countries. UBS Europe SE has branches and offices in a number of EU member states, including Germany, Italy, Luxembourg, Spain and Austria.

UBS Group Funding (Jersey) Ltd. was dissolved in 2017.

#### Subsidiaries of UBS Group AG as of 31 December 2017

Company	Registered office	Share capital in million	Equity interest accumulated in %
UBS AG	Zurich and Basel, Switzerland	CHF 385.8	100.0
UBS Business Solutions AG <sup>1</sup>	Zurich, Switzerland	CHF 1.0	100.0
UBS Group Funding (Switzerland) AG	Zurich, Switzerland	CHF 0.1	100.0

<sup>1</sup> UBS Business Solutions (India) Private Limited and UBS Business Solutions Poland Sp. z o.o. are directly held subsidiaries of UBS Business Solutions AG.

#### Individually significant subsidiaries of UBS AG as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD 2,250.0 <sup>1</sup>	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF 43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD 0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR 446.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP 226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD 1,283.1 <sup>2</sup>	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF 10.0	100.0

<sup>1</sup> Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. <sup>2</sup> Comprised of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

## Note 28 Interests in subsidiaries and other entities (continued)

### Other subsidiaries

The table below lists other subsidiaries of UBS AG that are not individually significant but that contribute to the Group's total assets and aggregated profit before tax thresholds and are thereby disclosed in accordance with the requirements set by the SEC.

#### Other subsidiaries of UBS AG as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Inc.	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD 0.0	100.0
UBS Asset Management (Australia) Ltd	Sydney, Australia	Asset Management	AUD 20.1 <sup>1</sup>	100.0
UBS Asset Management (Deutschland) GmbH	Frankfurt, Germany	Asset Management	EUR 7.7	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong, Hong Kong	Asset Management	HKD 206.0	100.0
UBS Asset Management (Japan) Ltd	Tokyo, Japan	Asset Management	JPY 2,200.0	100.0
UBS Asset Management (Singapore) Ltd	Singapore, Singapore	Asset Management	SGD 4.0	100.0
UBS Asset Management (UK) Ltd	London, United Kingdom	Asset Management	GBP 125.0	100.0
UBS Business Solutions US LLC	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Card Center AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF 0.1	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS (France) S.A.	Paris, France	Wealth Management	EUR 133.0	100.0
UBS Fund Advisor, L.L.C.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Fund Management (Luxembourg) S.A.	Luxembourg, Luxembourg	Asset Management	EUR 13.0	100.0
UBS Fund Management (Switzerland) AG	Basel, Switzerland	Asset Management	CHF 1.0	100.0
UBS Hedge Fund Solutions LLC	Wilmington, Delaware, USA	Asset Management	USD 0.1	100.0
UBS (Monaco) S.A.	Monte Carlo, Monaco	Wealth Management	EUR 49.2	100.0
UBS O'Connor LLC	Dover, Delaware, USA	Asset Management	USD 1.0	100.0
UBS Real Estate Securities Inc.	Wilmington, Delaware, USA	Investment Bank	USD 0.0	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD 9.0	100.0
UBS Securities (Thailand) Ltd	Bangkok, Thailand	Investment Bank	THB 500.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD 0.3 <sup>1</sup>	100.0
UBS Securities India Private Limited	Mumbai, India	Investment Bank	INR 140.0	100.0
UBS Securities Japan Co., Ltd.	Tokyo, Japan	Investment Bank	JPY 32,100.0	100.0
UBS Securities Pte. Ltd.	Singapore, Singapore	Investment Bank	SGD 420.4	100.0
UBS South Africa (Proprietary) Limited	Sandton, South Africa	Investment Bank	ZAR 0.0	100.0
UBS UK Properties Limited	London, United Kingdom	Corporate Center	GBP 132.0	100.0

<sup>1</sup> Includes a nominal amount relating to redeemable preference shares.

## Note 28 Interests in subsidiaries and other entities (continued)

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### Changes in consolidation scope

In 2017, no significant subsidiaries were added to or removed from the scope of consolidation as a result of acquisitions or disposals.

### Non-controlling interests

Non-controlling interests decreased by CHF 625 million in 2017 to CHF 57 million as a EUR 600 million non-Basel III-compliant hybrid tier 1 capital instrument was redeemed on its first call date. As of 31 December 2017 non-controlling interests were not material to the Group.

### Consolidated structured entities

UBS consolidates a structured entity (SE) if it has power over the relevant activities of the entity, exposure to variable returns and the ability to use its power to affect its returns. Consolidated SEs include certain investment funds, securitization vehicles and client investment vehicles. UBS has no individually significant subsidiaries that are SEs.

Investment fund SEs are generally consolidated when the Group's aggregate exposure combined with its decision-making rights indicate the ability to use such power in a principal capacity. Typically the Group will have decision-making rights as fund manager, earning a management fee, and will provide

seed capital at the inception of the fund or hold a significant percentage of the fund units. Where other investors do not have the substantive ability to remove UBS as decision maker, the Group is deemed to have control and therefore consolidates the fund.

Securitization SEs are generally consolidated when the Group holds a significant percentage of the asset-backed securities issued by the SE and has the power to remove without cause the servicer of the asset portfolio.

Client investment SEs are generally consolidated when the Group has a substantive liquidation right over the SE or a decision right over the assets held by the SE and has exposure to variable returns through derivatives traded with the SE or holding notes issued by the SE.

In 2017 and 2016, the Group has not entered into any contractual obligation that could require the Group to provide financial support to consolidated SEs. In addition, the Group did not provide support, financial or otherwise, to a consolidated SE when the Group was not contractually obligated to do so, nor has the Group an intention to do so in the future. Further, the Group did not provide support, financial or otherwise, to a previously unconsolidated SE that resulted in the Group controlling the SE during the reporting period.

## Note 28 Interests in subsidiaries and other entities (continued)

### b) Interests in associates and joint ventures

As of 31 December 2017 and 2016, no associate or joint venture was individually material to the Group. In addition, there were no significant restrictions on the ability of associates or joint ventures to transfer funds to UBS Group AG or its

subsidiaries in the form of cash dividends or to repay loans or advances made. There were no quoted market prices for any associates or joint ventures of the Group.

#### Investments in associates and joint ventures

CHF million	31.12.17	31.12.16
Carrying amount at the beginning of the year	963	954
Additions	3	3
Disposals	0	(2)
Share of comprehensive income	98	82
<i>of which: share of net profit<sup>1</sup></i>	75	106
<i>of which: share of other comprehensive income<sup>2</sup></i>	23	(24)
Dividends received	(51)	(50)
Impairment	(7)	0
Foreign currency translation	12	(23)
<b>Carrying amount at the end of the year</b>	<b>1,018</b>	<b>963</b>
<i>of which: associates</i>	<i>989</i>	<i>934</i>
<i>of which: UBS Securities Co. Limited, Beijing<sup>3</sup></i>	<i>401</i>	<i>392</i>
<i>of which: SIX Group AG, Zurich<sup>4</sup></i>	<i>464</i>	<i>426</i>
<i>of which: other associates</i>	<i>124</i>	<i>116</i>
<i>of which: joint ventures</i>	<i>29</i>	<i>29</i>

<sup>1</sup> For 2017, consists of CHF 60 million from associates and CHF 15 million from joint ventures. For 2016, consists of CHF 94 million from associates and CHF 12 million from joint ventures. <sup>2</sup> For 2017, consists of CHF 24 million from associates and negative CHF 1 million from joint ventures. For 2016, consists of negative CHF 25 million from associates and CHF 0 million from joint ventures. <sup>3</sup> UBS AG's equity interest amounts to 24.99%. <sup>4</sup> UBS AG's equity interest amounts to 17.31%. UBS AG is represented on the Board of Directors.

## Note 28 Interests in subsidiaries and other entities (continued)

### c) Interests in unconsolidated structured entities

During 2017, the Group sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles as well as certain investment funds, that UBS did not consolidate as of 31 December 2017 because it did not control these entities.

The table below presents the Group's interests in and maximum exposure to loss from unconsolidated SEs as well as the total assets held by the SEs in which UBS had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying value of UBS's interest as of year-end has been disclosed.

#### Interests in unconsolidated structured entities

CHF million, except where indicated	31.12.17				Maximum exposure to loss <sup>1</sup>
	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	363	308	6,143	6,815	6,815
Positive replacement values	21	68	22	111	111
Loans	0	0	97	97	97
Financial assets designated at fair value	84	66 <sup>2</sup>	105	255	1,780
Financial assets available for sale	0	3,865	45	3,910	3,910
Other assets	291	29 <sup>2</sup>	0	320	1,407
<b>Total assets</b>	<b>760<sup>3</sup></b>	<b>4,337</b>	<b>6,412</b>	<b>11,508</b>	
Negative replacement values	20 <sup>4</sup>	53	203	276	14
<b>Total liabilities</b>	<b>20</b>	<b>53</b>	<b>203</b>	<b>276</b>	
<b>Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)</b>	<b>57<sup>5</sup></b>	<b>78<sup>6</sup></b>	<b>412<sup>7</sup></b>		

CHF million, except where indicated	31.12.16				Maximum exposure to loss <sup>1</sup>
	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	634	394	6,215	7,243	7,243
Positive replacement values	40	76	101	217	217
Loans	0	0	79	79	79
Financial assets designated at fair value	103	83 <sup>2</sup>	98	284	1,863
Financial assets available for sale	0	3,381	58	3,439	3,439
Other assets	289	37 <sup>2</sup>	0	327	1,490
<b>Total assets</b>	<b>1,066<sup>3</sup></b>	<b>3,971</b>	<b>6,552</b>	<b>11,589</b>	
Negative replacement values	33 <sup>4</sup>	346	67	446	90
<b>Total liabilities</b>	<b>33</b>	<b>346</b>	<b>67</b>	<b>446</b>	
<b>Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)</b>	<b>72<sup>5</sup></b>	<b>102<sup>6</sup></b>	<b>334<sup>7</sup></b>		

<sup>1</sup> For purposes of this disclosure, maximum exposure to loss amounts do not consider the risk-reducing effects of collateral or other credit enhancements. <sup>2</sup> Represents the carrying value of loan commitments, both designated at fair value and held at amortized cost. The maximum exposure to loss for these instruments is equal to the notional amount. <sup>3</sup> As of 31 December 2017, CHF 0.7 billion of the CHF 0.8 billion (31 December 2016: CHF 1.0 billion of the CHF 1.1 billion) was held in Corporate Center – Non-core and Legacy Portfolio. <sup>4</sup> Comprised of credit default swap (CDS) liabilities and other swap liabilities. The maximum exposure to loss for CDS is equal to the sum of the negative carrying value and the notional amount. For other swap liabilities, no maximum exposure to loss is reported. <sup>5</sup> Represents principal amount outstanding. <sup>6</sup> Represents the market value of total assets. <sup>7</sup> Represents the net asset value of the investment funds sponsored by UBS and the carrying value of UBS's interests in the investment funds not sponsored by UBS.

## Note 28 Interests in subsidiaries and other entities (continued)

The Group retains or purchases interests in unconsolidated SEs in the form of direct investments, financing, guarantees, letters of credit, derivatives and through management contracts.

The Group's maximum exposure to loss is generally equal to the carrying value of the Group's interest in the SE, with the exception of guarantees, letters of credit and credit derivatives, for which the contract's notional amount, adjusted for losses already incurred, represents the maximum loss that the Group is exposed to. In addition, the current fair value of derivative swap instruments with a positive replacement value only, such as total return swaps, is presented as the maximum exposure to loss. Risk exposure for these swap instruments could change over time with market movements.

The maximum exposure to loss disclosed in the table on the previous page does not reflect the Group's risk management activities, including effects from financial instruments that may be used to economically hedge the risks inherent in the unconsolidated SE or the risk-reducing effects of collateral or other credit enhancements.

In 2017 and 2016, the Group did not provide support, financial or otherwise, to an unconsolidated SE when not contractually obligated to do so, nor has the Group an intention to do so in the future.

In 2017 and 2016, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in net trading income, which have generally been hedged with other financial instruments, as well as fee and commission income received from UBS-sponsored funds.

### *Interests in securitization vehicles*

As of 31 December 2017 and 31 December 2016, the Group held interests, both retained and acquired, in various securitization vehicles, a majority of which are held within Corporate Center – Non-core and Legacy Portfolio. The Investment Bank also retained interests in securitization vehicles related to financing, underwriting, secondary market and derivative trading activities. In some cases the Group may be required to absorb losses from an unconsolidated SE before other parties because the Group's interest is subordinated to others in the ownership structure.

An overview of the Group's interests in unconsolidated securitization vehicles and the relative ranking and external credit rating of those interests is presented in the table on the following pages. The numbers outlined in this table differ from the securitization positions presented in the 31 December

2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under "Pillar 3 disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors), primarily due to: (i) exclusion from the table on the following page of synthetic securitizations transacted with entities that are not SEs and transactions in which the Group did not have an interest because it did not absorb any risk, (ii) a different measurement basis in certain cases (e.g., IFRS carrying value within the table above compared with net exposure amount at default for Basel III Pillar 3 disclosures) and (iii) different classification of vehicles viewed as sponsored by the Group versus sponsored by third parties.

- Refer to Note 1a item 1 for more information on Group's accounting policies regarding consolidation and sponsorship of securitization vehicles and other structured entities
- Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under "Pillar 3 disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors) for more information

### *Interests in client vehicles*

As of 31 December 2017 and 31 December 2016, the Group retained interests in client vehicles sponsored by UBS and third parties that relate to financing and derivative activities, and to hedge structured product offerings. Included within these investments are securities guaranteed by US government agencies.

### *Interests in investment funds*

The Group holds interests in a number of investment funds, primarily resulting from seed investments or to hedge structured product offerings. In addition to the interests disclosed in the table on the previous page, the Group manages the assets of various pooled investment funds and receives fees that are based, in whole or part, on the net asset value of the fund and / or the performance of the fund. The specific fee structure is determined on the basis of various market factors and considers the nature of the fund, the jurisdiction of incorporation as well as fee schedules negotiated with clients. These fee contracts represent an interest in the fund as they align the Group's exposure with investors, providing a variable return that is based on the performance of the entity. Depending on the structure of the fund, these fees may be collected directly from the fund assets and / or from the investors. Any amounts due are collected on a regular basis and are generally backed by the assets of the fund. The Group did not have any material exposure to loss from these interests as of 31 December 2017 or as of 31 December 2016.

## Note 28 Interests in subsidiaries and other entities (continued)

### Interests in unconsolidated securitization vehicles<sup>1</sup>

	31.12.17				
<i>CHF million, except where indicated</i>	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities <sup>2</sup>	Re-securitization <sup>3</sup>	Total
<b>Sponsored by UBS</b>					
Interests in senior tranches	84	24	0	10	118
<i>of which: rated investment grade</i>	0	24			24
<i>of which: rated sub-investment grade</i>	84				84
<i>of which: defaulted</i>				10	10
Interests in junior tranches	0	9	0	0	9
<i>of which: rated investment grade</i>		9			9
<b>Total</b>	84	32	0	10	126
<i>of which: Trading portfolio assets</i>	0	32	0	10	43
<i>of which: Financial assets designated at fair value</i>	84	0	0	0	84
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	1	10	0	1	12
<b>Not sponsored by UBS</b>					
Interests in senior tranches	75	6	165	64	311
<i>of which: rated investment grade</i>	75	6	165	64	311
Interests in mezzanine tranches	9	1	0	0	9
<i>of which: rated investment grade</i>		1			1
<i>of which: defaulted</i>	9				9
Interests in junior tranches	1	0	0	0	1
<i>of which: rated sub-investment grade</i>	1				1
Tranche information not available	0	0	0	0	0
<i>of which: rated investment grade</i>	0				0
<i>of which: not rated</i>	0				0
<b>Total</b>	85	7	165	64	321
<i>of which: Trading portfolio assets</i>	85	7	165	64	321
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	18	5	20	0	43

<sup>1</sup> This table excludes receivables and derivative transactions with securitization vehicles. <sup>2</sup> Includes credit card, auto and student loan structures. <sup>3</sup> Includes collateralized debt obligations.



## Note 28 Interests in subsidiaries and other entities (continued)

### Interests in unconsolidated securitization vehicles (continued)<sup>1</sup>

	31.12.16				
	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities <sup>2</sup>	Re-securitization <sup>3</sup>	Total
<i>CHF million, except where indicated</i>					
<b>Sponsored by UBS</b>					
Interests in senior tranches	103	34	0	14	151
<i>of which: rated investment grade</i>	0	34			34
<i>of which: rated sub-investment grade</i>	103				103
<i>of which: defaulted</i>				14	14
Interests in mezzanine tranches	1	0	0	0	1
<i>of which: rated sub-investment grade</i>	1				1
<b>Total</b>	104	34	0	14	152
<i>of which: Trading portfolio assets</i>	1	34	0	14	49
<i>of which: Financial assets designated at fair value</i>	103	0	0	0	103
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	2	13	0	1	16
<b>Not sponsored by UBS</b>					
Interests in senior tranches	165	4	241	125	535
<i>of which: rated investment grade</i>	165	4	241	125	535
Interests in mezzanine tranches	32	0	0	0	32
<i>of which: rated investment grade</i>	29				29
<i>of which: defaulted</i>	3				3
Interests in junior tranches	18	0	0	0	18
<i>of which: rated investment grade</i>	17				17
<i>of which: rated sub-investment grade</i>	1				1
<b>Total</b>	215	4	241	125	585
<i>of which: Trading portfolio assets</i>	215	4	241	125	585
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	41	8	5	1	56

<sup>1</sup> This table excludes receivables and derivative transactions with securitization vehicles. <sup>2</sup> Includes credit card, auto and student loan structures. <sup>3</sup> Includes collateralized debt obligations.

## Note 28 Interests in subsidiaries and other entities (continued)

### *Sponsored unconsolidated structured entities in which UBS did not have an interest*

For several sponsored SEs, no interest was held by the Group at year-end. However, during the respective reporting period the Group transferred assets, provided services and held instruments that did not qualify as an interest in these sponsored SEs, and accordingly earned income or incurred expenses from these entities. The table below presents the income earned and expenses incurred directly from these entities during the year as well as corresponding asset information. The table does not include income earned and expenses incurred from risk management activities, including income and expenses from financial instruments used to economically hedge instruments transacted with the unconsolidated SEs.

The majority of the fee income arose from investment funds that are sponsored and administrated by the Group, but managed by third parties. As the Group does not provide any active management services, UBS was not exposed to risk from the performance of these entities and was therefore deemed not to have an interest in them. In certain structures, the fees

receivable may be collected directly from the investors and have therefore not been included in the table below.

The Group also recorded net trading income from mark-to-market movements arising primarily from derivatives, such as interest rate and currency swaps as well as credit derivatives, through which the Group purchases protection, and financial liabilities designated at fair value, which do not qualify as interests because the Group does not absorb variability from the performance of the entity. Total income reported does not reflect economic hedges or other mitigating effects from the Group's risk management activities.

During 2017, UBS and third parties transferred assets totaling CHF 17 billion (2016: CHF 13 billion) into sponsored securitization and client vehicles created in 2017. For sponsored investment funds, transfers arose during the period as investors invested and redeemed positions, thereby changing the overall size of the funds, which, when combined with market movements, resulted in a total closing net asset value of CHF 15 billion (31 December 2016: CHF 14 billion).

### Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end<sup>1</sup>

	As of or for the year ended			
	31.12.17			
	Securitization vehicles	Client vehicles	Investment funds	Total
<i>CHF million, except where indicated</i>				
Net interest income	2	(9)	0	(7)
Net fee and commission income	0	0	40	40
Net trading income	(8)	(49)	2	(55)
<b>Total income</b>	<b>(6)</b>	<b>(58)</b>	<b>43</b>	<b>(21)</b>
<b>Asset information (CHF billion)</b>	<b>10<sup>2</sup></b>	<b>7<sup>3</sup></b>	<b>15<sup>4</sup></b>	

	As of or for the year ended			
	31.12.16			
	Securitization vehicles	Client vehicles	Investment funds	Total
<i>CHF million, except where indicated</i>				
Net interest income	3	(6)	0	(3)
Net fee and commission income	0	0	53	53
Net trading income	2	(158)	29	(128)
<b>Total income</b>	<b>4</b>	<b>(165)</b>	<b>82</b>	<b>(78)</b>
<b>Asset information (CHF billion)</b>	<b>7<sup>2</sup></b>	<b>6<sup>3</sup></b>	<b>14<sup>4</sup></b>	

<sup>1</sup> These tables exclude profit attributable to non-controlling interests of CHF 72 million for the year ended 31 December 2017 and CHF 78 million for the year ended 31 December 2016. <sup>2</sup> Represents the amount of assets transferred to the respective securitization vehicles. Of the total amount transferred, CHF 2 billion was transferred by UBS (31 December 2016: CHF 2 billion) and CHF 8 billion was transferred by third parties (31 December 2016: CHF 5 billion). <sup>3</sup> Represents total assets transferred to the respective client vehicles. Of the total amount transferred, CHF 6 billion was transferred by UBS (31 December 2016: CHF 5 billion) and CHF 1 billion was transferred by third parties (31 December 2016: CHF 1 billion). <sup>4</sup> Represents the total net asset value of the respective investment funds.

## Note 29 Business combinations

In 2017 and 2016, UBS did not complete any significant business combinations.

## Note 30 Changes in organization and disposals

### Measures to improve the resolvability of the UBS Group

In December 2014, UBS Group AG became the holding company of the UBS Group. In 2015, UBS transferred its Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG and implemented a more self-sufficient business and operating model for UBS Limited.

UBS Business Solutions AG was established in 2015 as a direct subsidiary of UBS Group AG to act as the Group service company. In the second half of 2015, UBS transferred the ownership of the majority of its existing service subsidiaries outside the US to UBS Business Solutions AG. In 2017, shared services functions in Switzerland and the UK were transferred from UBS AG to UBS Business Solutions AG, which is the Group service company and a wholly owned subsidiary of UBS Group AG. UBS also completed the transfer of the shared services employees in the US to its US service company, UBS Business Solutions US LLC, a wholly owned subsidiary of UBS Americas Holding LLC.

In addition, UBS transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, UBS merged its Wealth Management subsidiaries in Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain into UBS Deutschland AG, which was renamed to UBS Europe SE, to establish UBS's new European legal entity, which is headquartered in Frankfurt, Germany.

UBS established UBS Group Funding (Switzerland) AG in 2016 as a wholly owned direct subsidiary of UBS Group AG, to issue loss-absorbing additional tier 1 (AT1) capital instruments and total loss-absorbing capacity (TLAC)-eligible senior unsecured debt, which are guaranteed by UBS Group AG. In the first half of 2017, UBS transferred the then outstanding TLAC-eligible senior unsecured debt to UBS Group Funding (Switzerland) AG as the issuer.

### Sale of subsidiaries and businesses

In the fourth quarter of 2017, UBS completed the sale of Asset Management's fund administration servicing units in Luxembourg and Switzerland to Northern Trust, resulting in a pre-tax gain on sale of CHF 153 million.

In the second quarter of 2017, UBS completed the sale of a life insurance subsidiary within Wealth Management. A loss on sale of CHF 23 million was recognized in 2016 relating to this transaction. Prior to completion of the sale, the assets and liabilities of this business were presented as a disposal group held for sale within *Other assets* and *Other liabilities* (31 December 2016: CHF 5.1 billion and CHF 5.2 billion, respectively).

In 2015, UBS sold its Alternative Fund Services (AFS) business to Mitsubishi UFJ Financial Group Investor Services. Upon completion of the sale, UBS recognized a gain on sale of CHF 56 million and reclassified an associated net foreign currency translation gain of CHF 119 million from *Other comprehensive income* to the income statement. Also during 2015, UBS completed the sale of certain subsidiaries and businesses within Wealth Management, which resulted in the recognition of a combined net gain of CHF 169 million.

### Restructuring expenses

Restructuring expenses arise from programs that materially change either the scope of business that the Group engages in or the manner in which such business is conducted. Restructuring expenses are necessary to effect such programs and include items such as severance and other personnel-related expenses, duplicate headcount costs, impairment and accelerated depreciation of assets, contract termination costs, consulting fees, and related infrastructure and system costs. These costs are presented in the income statement according to the underlying nature of the expense.

### Note 30 Changes in organization and disposals (continued)

#### Net restructuring expenses by business division and Corporate Center unit

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Wealth Management	463	447	323
Wealth Management Americas	113	139	137
Personal & Corporate Banking	103	117	101
Asset Management	100	100	82
Investment Bank	359	577	396
Corporate Center	30	78	196
of which: Services	19	57	140
of which: Group ALM	4	0	0
of which: Non-core and Legacy Portfolio	6	21	56
<b>Total net restructuring expenses</b>	<b>1,168</b>	<b>1,458</b>	<b>1,235</b>
of which: personnel expenses	534	751	460
of which: general and administrative expenses	627	695	761
of which: depreciation and impairment of property, equipment and software	7	11	12
of which: amortization and impairment of intangible assets	0	0	2

#### Net restructuring expenses by personnel expense category

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Salaries	346	435	312
Variable compensation – performance awards	34	102	38
Variable compensation – other	98	209	108
Contractors	62	56	46
Social security	8	8	5
Pension and other post-employment benefit plans	(29)	(75)	(65)
Other personnel expenses	15	17	15
<b>Total net restructuring expenses: personnel expenses</b>	<b>534</b>	<b>751</b>	<b>460</b>

#### Net restructuring expenses by general and administrative expense category

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Occupancy	75	123	109
Rent and maintenance of IT and other equipment	93	94	31
Communication and market data services	1	1	0
Administration	25	16	6
Marketing and public relations	1	0	0
Travel and entertainment	14	16	17
Professional fees	186	162	187
Outsourcing of IT and other services	240	289	316
Other <sup>1</sup>	(8)	(5)	95
<b>Total net restructuring expenses: general and administrative expenses</b>	<b>627</b>	<b>695</b>	<b>761</b>

<sup>1</sup> Mainly comprised of onerous real estate lease contracts.

## Note 31 Operating leases and finance leases

Information on lease contracts classified as operating leases where UBS is the lessee is provided in Note 31a and information on finance leases where UBS acts as a lessor is provided in Note 31b.

### a) Operating lease commitments

As of 31 December 2017, UBS was obligated under a number of non-cancelable operating leases for premises and equipment used primarily for banking purposes. The significant premises leases usually include renewal options and escalation clauses in line with general office rental market conditions, as well as rent

adjustments based on price indices. However, the lease agreements do not contain contingent rent payment clauses and purchase options, nor do they impose any restrictions on UBS's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

<i>CHF million</i>	<b>31.12.17</b>
<b>Expenses for operating leases to be recognized in:</b>	
2018	666
2019	602
2020	516
2021	429
2022	382
2023 and thereafter	2,013
Subtotal commitments for minimum payments under operating leases	4,608
Less: Sublease rental income commitments	262
<b>Net commitments for minimum payments under operating leases</b>	<b>4,346</b>

<i>CHF million</i>	<b>31.12.17</b>	31.12.16	31.12.15
<b>Gross operating lease expense recognized in the income statement</b>	<b>725</b>	749	743
Sublease rental income	67	78	70
<b>Net operating lease expense recognized in the income statement</b>	<b>658</b>	671	673

### b) Finance lease receivables

UBS leases a variety of assets to third parties under finance leases, such as commercial vehicles, production lines, medical equipment, construction equipment and aircraft. At the end of the respective lease term, assets may be sold to third parties or further leased. Lessees may participate in any sales proceeds achieved. Lease expenses cover the cost of the assets less their residual value as well as financing costs.

As of 31 December 2017, unguaranteed residual values of CHF 158 million had been accrued, and the accumulated allowance for uncollectible minimum lease payments receivable amounted to CHF 10 million. No contingent rents were received in 2017.

#### Lease receivables

<i>CHF million</i>	<b>31.12.17</b>		
	<b>Total minimum lease payments</b>	<b>Unearned finance income</b>	<b>Present value</b>
2018	333	22	311
2019–2022	684	36	648
Thereafter	112	3	110
<b>Total</b>	<b>1,129</b>	<b>61</b>	<b>1,069</b>

## Note 32 Related parties

UBS defines related parties as associates (entities that are significantly influenced by UBS), joint ventures (entities in which UBS shares control with another party), post-employment benefit plans for UBS employees, key management personnel, close family members of key management personnel and entities

that are, directly or indirectly, controlled or jointly controlled by key management personnel or their close family members. Key management personnel is defined as members of the Board of Directors (BoD) and Group Executive Board (GEB).

### a) Remuneration of key management personnel

The Chairman of the BoD has a specific management employment contract and receives pension benefits upon retirement. Total remuneration of the Chairman of the Board of Directors and all GEB members is included in the table below.

#### Remuneration of key management personnel

CHF million	31.12.17	31.12.16	31.12.15
Base salaries and other cash payments <sup>1</sup>	25	25	23
Incentive awards – cash <sup>2</sup>	15	11	10
Annual incentive award under DCCP	22	22	21
Employer's contributions to retirement benefit plans	3	3	2
Benefits in kind, fringe benefits (at market value)	2	2	2
Equity-based compensation <sup>3</sup>	40	41	42
<b>Total</b>	<b>106</b>	<b>104</b>	<b>99</b>

<sup>1</sup> Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). <sup>2</sup> Includes immediate and deferred cash. <sup>3</sup> Expenses for shares granted are calculated at grant date of the respective award and allocated over the vesting period, generally for 5 years. Refer to Note 27 for more information. In 2017, 2016 and 2015, equity-based compensation was entirely comprised of EOP awards.

The independent members of the BoD do not have employment or service contracts with UBS, and thus are not entitled to benefits upon termination of their service on the BoD. Payments to these individuals for their services as external board members amounted to CHF 7.1 million in 2017, CHF 7.2 million in 2016 and CHF 6.7 million in 2015.

### b) Equity holdings of key management personnel

#### Equity holdings of key management personnel

	31.12.17	31.12.16
Number of stock options from equity participation plans held by non-independent members of the BoD and the GEB members <sup>1</sup>	398,867	620,950
Number of shares held by members of the BoD, GEB and parties closely linked to them <sup>2</sup>	3,709,539	3,267,911

<sup>1</sup> Refer to Note 27 for more information. <sup>2</sup> Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, 95,597 shares were held by close family members of key management personnel on 31 December 2017 and 31 December 2016. No shares were held by entities that are directly or indirectly controlled or jointly controlled by key management personnel or their close family members on 31

December 2017 and 31 December 2016. Refer to Note 27 for more information. As of 31 December 2017, no member of the BoD or GEB was the beneficial owner of more than 1% of UBS Group AG's shares.

## Note 32 Related parties (continued)

### c) Loans, advances and mortgages to key management personnel

The non-independent members of the BoD and GEB members are granted loans, fixed advances and mortgages in the ordinary course of business on substantially the same terms and conditions that are available to other employees, including interest rates and collateral, and neither involve more than the normal risk of collectibility nor contain any other unfavorable

features for the firm. Independent BoD members are granted loans and mortgages in the ordinary course of business at general market conditions.

Movements in the loan, advances and mortgage balances are as follows.

#### Loans, advances and mortgages to key management personnel<sup>1</sup>

<i>CHF million</i>	2017	2016
Balance at the beginning of the year	41	33
Additions	1	21
Reductions	(1)	(13)
Balance at the end of the year <sup>2</sup>	41	41

<sup>1</sup> All loans are secured loans. <sup>2</sup> Excludes unused uncommitted credit facilities for two GEB members and one BoD member of CHF 5,196,294 as of 31 December 2017 and for one GEB and one BoD member of CHF 2,684,498 as of 31 December 2016.

### d) Other related party transactions with entities controlled by key management personnel

In 2017 and 2016, UBS did not enter into transactions with entities that are directly or indirectly controlled or jointly controlled by UBS's key management personnel or their close family members and as of 31 December 2017, 31 December 2016 and 31 December 2015, there were no outstanding balances related to such transactions. Furthermore, in 2017 and

2016, entities controlled by key management personnel did not sell any goods or provide any services to UBS, and therefore did not receive any fees from UBS. UBS also did not provide services to such entities in 2017 and 2016, and therefore also received no fees.

## Note 32 Related parties (continued)

### e) Transactions with associates and joint ventures

#### Loans to and outstanding receivables from associates and joint ventures

<i>CHF million</i>	2017	2016
Carrying value at the beginning of the year	472	476
Additions	82	4
Reductions	(3)	(8)
Carrying value at the end of the year	551	472
<i>of which: unsecured loans</i>	540	461

#### Other transactions with associates and joint ventures

<i>CHF million</i>	As of or for the year ended	
	31.12.17	31.12.16
Payments to associates and joint ventures for goods and services received	177	153
Fees received for services provided to associates and joint ventures	2	3
Commitments and contingent liabilities to associates and joint ventures	4	4

→ Refer to Note 28 for an overview of investments in associates and joint ventures



## Note 33 Invested assets and net new money

### Invested assets

Invested assets include all client assets managed by or deposited with UBS for investment purposes. Invested assets include managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts and wealth management securities or brokerage accounts. All assets held for purely transactional purposes and custody-only assets, including corporate client assets held for cash management and transactional purposes, are excluded from invested assets as the Group only administers the assets and does not offer advice on how the assets should be invested. Also excluded are non-bankable assets (e.g., art collections) and deposits from third-party banks for funding or trading purposes.

Discretionary assets are defined as client assets that UBS decides how to invest. Other invested assets are those where the client ultimately decides how the assets are invested. When a single product is created in one business division and sold in another, it is counted in both the business division that manages the investment and the one that distributes it. This results in double counting within UBS total invested assets, as both business divisions are independently providing a service to their respective clients, and both add value and generate revenue.

### Net new money

Net new money in a reporting period is the amount of invested assets that are entrusted to UBS by new and existing clients, less those withdrawn by existing clients and clients who terminated their relationship with UBS.

Net new money is calculated using the direct method, under which inflows and outflows to / from invested assets are determined at the client level based on transactions. Interest and dividend income from invested assets are not counted as net new money inflows. Market and currency movements as well as fees, commissions and interest on loans charged are excluded from net new money, as are the effects resulting from any acquisition or divestment of a UBS subsidiary or business. Reclassifications between invested assets and custody-only assets as a result of a change in the service level delivered are generally treated as net new money flows; however, where such change in service level directly results from a new externally imposed regulation, the one-time net effect of the implementation is reported as an asset reclassification without net new money impact.

The Investment Bank does not track invested assets and net new money. However, when a client is transferred from the Investment Bank to another business division, this produces net new money even though client assets were already with UBS. There were no such transfers between the Investment Bank and other business divisions in 2017 and 2016.

### Invested assets and net new money

	For the year ended	
CHF billion	31.12.17	31.12.16
Fund assets managed by UBS	330	275
Discretionary assets	1,025	886
Other invested assets <sup>1</sup>	1,824	1,649
<b>Total invested assets<sup>1,2</sup></b>	<b>3,179</b>	<b>2,810</b>
<i>of which: double counts</i>	<i>204</i>	<i>176</i>
<b>Net new money<sup>2</sup></b>	<b>104</b>	<b>27</b>

<sup>1</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 were corrected by CHF 12 billion. <sup>2</sup> Includes double counts.

### Development of invested assets

	For the year ended	
CHF billion	31.12.17	31.12.16
Total invested assets at the beginning of the year <sup>1,2</sup>	2,810	2,678
Net new money	104	27
Market movements <sup>3</sup>	313	98
Foreign currency translation	(45)	21
Other effects	(3)	(14)
<i>of which: acquisitions / (divestments)</i>	<i>4</i>	<i>(14)</i>
<b>Total invested assets at the end of the year<sup>1,2</sup></b>	<b>3,179</b>	<b>2,810</b>

<sup>1</sup> Includes double counts. <sup>2</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively. <sup>3</sup> Includes interest and dividend income.

## Note 34 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of foreign operations into Swiss francs.

	Spot rate		Average rate <sup>1</sup>		
	As of		For the year ended		
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.15
1 USD	0.97	1.02	0.98	0.99	0.97
1 EUR	1.17	1.07	1.12	1.09	1.06
1 GBP	1.32	1.26	1.28	1.32	1.47
100 JPY	0.86	0.87	0.88	0.91	0.80

<sup>1</sup> Monthly income statement items of foreign operations with a functional currency other than the Swiss franc are translated with month-end rates into Swiss francs. Disclosed average rates for a year represent an average of 12 month-end rates, weighted according to the income and expense volumes of all foreign operations of the Group with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for the Group.

## Note 35 Events after the reporting period

### Events subsequent to the publication of the unaudited fourth quarter 2017 report

The 2017 results and the balance sheet as of 31 December 2017 differ from those presented in the unaudited fourth quarter 2017 report published on 22 January 2018 as a result of events adjusted for after the balance sheet date. Provisions for litigation, regulatory and similar matters increased, which reduced 2017 operating profit before tax by CHF 141 million, 2017 net profit attributable to shareholders by CHF 112 million, and both basic and diluted earnings per share by CHF 0.03.

### Integration of Wealth Management and Wealth Management Americas into a single business division

Effective 1 February 2018, UBS is integrating its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division. The firm will report the results for Global Wealth Management beginning with the first quarter of 2018.

→ Refer to Note 1c for more information on the change in segment reporting

### Changes to the Pension Fund of UBS in Switzerland

As a result of the effects of continuing low and in some cases negative interest rates, diminished investment return expectations and increasing life expectancy, the Pension Fund of UBS in Switzerland and UBS have agreed measures that will take effect from the start of 2019 to support the long-term financial stability of the Swiss pension fund. As a result, the conversion

rate will be lowered, the regular retirement age and employee contributions will be increased, and savings contributions will start earlier. These measures will have no effect on current pensioners of UBS.

To mitigate the effects of the reduction of the conversion rate on future pensions, UBS will make a payment to employees' retirement assets in the Swiss pension fund of up to CHF 720 million in three installments in 2020, 2021 and 2022.

In accordance with International Financial Reporting Standards (IFRS), these measures, including the portion of the payment to be made by UBS that is attributable to past service, will lead to a reduction in the pension obligation recognized by UBS, resulting in a pre-tax gain of CHF 225 million in the first quarter of 2018 with no overall effect on total equity and a reduced pension service cost starting from January 2018. The gain will be recognized as a reduction in personnel expense within the income statement across the business divisions and Corporate Center, with a corresponding effect in *Other comprehensive income*, as the Swiss pension plan is currently in a surplus situation that cannot be recognized due to the IFRS asset ceiling requirement. If the Swiss pension plan remains in an asset ceiling position, the annual payments adjusted for expected forfeitures are expected to reduce total equity by approximately CHF 200 million per year over the installment period, with no effect on the income statement.

→ Refer to Note 26 for more information on the Swiss pension plan and the asset ceiling effect

## Note 36 Main differences between IFRS and Swiss GAAP

The consolidated financial statements of UBS Group AG are prepared in accordance with International Financial Reporting Standards (IFRS). The Swiss Financial Market Supervisory Authority (FINMA) requires financial groups that present their financial statements under IFRS to provide a narrative explanation of the main differences between IFRS and Swiss GAAP (FINMA Circular 2015 / 1 and the Banking Ordinance). Included in this Note are the significant differences in the recognition and measurement between IFRS and the provisions of the Banking Ordinance and the guidelines of FINMA governing true and fair view financial statement reporting pursuant to article 25 through article 42 of the Banking Ordinance.

### 1. Consolidation

Under IFRS, all entities that are controlled by the holding entity are consolidated.

Under Swiss GAAP, controlled entities that are deemed immaterial to the Group or that are held temporarily only are exempt from consolidation, but instead are recorded as participations accounted for under the equity method of accounting or as financial investments measured at the lower of cost or market value.

### 2. Financial assets available for sale

Under IFRS, financial assets available for sale are carried at fair value. Changes in fair value are recorded directly in equity until an asset is sold, collected or otherwise disposed of, or until an asset is determined to be impaired. At the time an available-for-sale asset is determined to be impaired, the cumulative unrealized loss previously recognized in equity is included in net profit or loss for the respective period. On disposal of a financial asset available for sale, the cumulative unrealized gain or loss previously recognized in equity is reclassified to the income statement.

Under Swiss GAAP, classification and measurement of financial assets designated as available for sale depend on the nature of the asset. Equity instruments with no permanent holding intent, as well as debt instruments, are classified as *Financial investments* and measured at the lower of (amortized) cost or market value. Market value adjustments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded in the income statement as

*Other income from ordinary activities*. Equity instruments with a permanent holding intent are classified as participations in *Non-consolidated investments in subsidiaries and other participations* and measured at cost less impairment. Impairment losses are recorded in the income statement as *Impairment of investments in non-consolidated subsidiaries and other participations*. Reversals of impairments up to the original cost amount as well as realized gains or losses upon disposal of the investment are recorded as *Extraordinary income / Extraordinary expenses* in the income statement.

### 3. Hedge accounting

Under IFRS, when cash flow hedge accounting is applied, the fair value gain or loss on the effective portion of the derivative designated as a cash flow hedge is recognized in equity. When fair value hedge accounting is applied, the fair value gains or losses of the derivative and the hedged item are recognized in the income statement.

Under Swiss GAAP, the effective portion of the fair value change of the derivative instrument designated as a cash flow or as fair value hedge is deferred on the balance sheet as *Other assets* or *Other liabilities*. The carrying value of the hedged item designated in fair value hedges is not adjusted for fair value changes attributable to the hedged risk.

### 4. Fair value option

Under IFRS, UBS applies the fair value option to certain financial assets and financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at fair value with changes in fair value reflected in *Net trading income*. The fair value option is applied primarily to structured debt instruments, certain non-structured debt instruments, high-quality liquid debt securities, structured reverse repurchase and repurchase agreements and securities borrowing agreements, certain structured and non-structured loans as well as loan commitments.

Under Swiss GAAP, the fair value option can only be applied to structured debt instruments that consist of a debt host contract and one or more embedded derivatives that do not relate to own equity. Furthermore, changes in fair value attributable to changes in unrealized own credit are not recognized.

## Note 36 Main differences between IFRS and Swiss GAAP (continued)

### 5. Goodwill and intangible assets

Under IFRS, goodwill acquired in a business combination is not amortized but tested annually for impairment. Intangible assets with an indefinite useful life are also not amortized but tested annually for impairment.

Under Swiss GAAP, goodwill and intangible assets with indefinite useful lives are amortized over a period not exceeding five years, unless a longer useful life, which may not exceed 10 years, can be justified.

### 6. Pension and other post-employment benefit plans

Swiss GAAP permits the use of IFRS or Swiss accounting standards for pension and other post-employment benefit plans, with the election made on a plan-by-plan basis.

UBS has elected to apply IFRS (IAS 19) for the non-Swiss defined benefit plans in UBS AG standalone financial statements and Swiss GAAP (FER 16) for the Swiss pension plan in the UBS AG and the UBS Switzerland AG standalone financial statements. The requirements of Swiss GAAP are better aligned with the specific nature of Swiss pension plans, which are hybrid in that they combine elements of defined contribution and defined benefit plans, but are treated as defined benefit plans under IFRS. Key differences between Swiss GAAP and IFRS include the treatment of dynamic elements, such as future salary increases and future interest credits on retirement savings, which are not considered under the static method used in accordance with Swiss GAAP. Also, the discount rate used to determine the defined benefit obligation in accordance with IFRS is based on the yield of high-quality corporate bonds of the market in the respective pension plan country. The discount rate used in accordance with Swiss GAAP, i.e., the technical interest rate, is determined by the Pension Foundation Board based on the expected returns of the Board's investment strategy.

For defined benefit plans, IFRS requires the full defined benefit obligation net of the plan assets to be recorded on the balance sheet, with changes resulting from remeasurements recognized directly in equity. However, for non-Swiss defined benefit plans for which IFRS accounting is elected, changes due to remeasurements are recognized in the income statement of UBS AG standalone under Swiss GAAP.

Swiss GAAP requires that employer contributions to the pension fund are recognized as personnel expenses in the income statement. Further, Swiss GAAP requires an assessment

as to whether, based on the financial statements of the pension fund prepared in accordance with Swiss accounting standards (FER 26), an economic benefit to, or obligation of, the employer arises from the pension fund and is recognized in the balance sheet when conditions are met. Conditions for recording a pension asset or liability would be met if, for example, an employer contribution reserve is available or the employer is required to contribute to the reduction of a pension deficit (on an FER 26 basis).

### 7. Netting of replacement values

Under IFRS, replacement values and related cash collateral are reported on a gross basis unless the restrictive IFRS netting requirements are met: i) existence of master netting agreements and related collateral arrangements that are unconditional and legally enforceable, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS and its counterparties, and ii) UBS's intention to either settle on a net basis or to realize the asset and settle the liability simultaneously.

Under Swiss GAAP, replacement values and related cash collateral are generally reported on a net basis, provided the master netting and the related collateral agreements are legally enforceable in the event of default, bankruptcy or insolvency of UBS's counterparties.

### 8. Negative interest

Under IFRS, negative interest income arising on a financial asset does not meet the definition of interest income and, therefore, negative interest on financial assets and negative interest on financial liabilities are presented within interest expense and interest income, respectively.

Under Swiss GAAP, negative interest on financial assets is presented within interest income and negative interest on financial liabilities is presented within interest expense.

### 9. Extraordinary income and expense

Certain non-recurring and non-operating income and expense items, such as realized gains or losses from the disposal of participations, fixed and intangible assets, as well as reversals of impairments of participations and fixed assets, are classified as extraordinary items under Swiss GAAP. This distinction is not available under IFRS. ▲

# UBS AG consolidated financial information

This section contains key figures for UBS AG consolidated, as well as a comparison of selected financial and capital information between UBS Group AG consolidated and UBS AG consolidated. Information for UBS AG consolidated does not differ materially from UBS Group AG on a consolidated basis.

## Comparison UBS Group AG consolidated versus UBS AG consolidated

The accounting policies applied under International Financial Reporting Standards (IFRS) to both UBS Group AG and UBS AG consolidated financial statements are identical. However, there are certain scope and presentation differences as noted below:

- Assets, liabilities, operating income, operating expenses and operating profit before tax relating to UBS Group AG and its directly held subsidiaries, including UBS Business Solutions AG, are reflected in the consolidated financial statements of UBS Group AG but not of UBS AG. UBS AG's assets, liabilities, operating income, and operating expenses related to transactions with UBS Group AG and its directly held subsidiaries are not subject to elimination in the UBS AG consolidated financial statements, but are eliminated in the UBS Group AG consolidated financial statements.
- Preferred notes issued by UBS AG are presented in the consolidated UBS Group AG balance sheet as equity attributable to non-controlling interests, while in the consolidated UBS AG balance sheet, these preferred notes are required to be presented as equity attributable to preferred noteholders. The last outstanding preferred notes were redeemed in December 2017.
- Fully applied going concern capital of UBS AG consolidated was lower than fully applied going concern capital of UBS Group AG consolidated as of 31 December 2017, reflecting lower additional tier 1 (AT1) capital, partly offset by higher common equity tier 1 (CET1) capital. The difference in CET1 capital was primarily due to compensation-related regulatory

capital accruals, liabilities and capital instruments that are reflected at the UBS Group AG level. The difference in AT1 capital relates to the issuances of AT1 capital notes by UBS Group AG, as well as Deferred Contingent Capital Plan awards related to the performance years 2014 to 2017.

- Refer to the "Capital management" section of this report for more information on differences in capital information between UBS Group AG consolidated and UBS AG consolidated
- Refer to Note 30 for more information on the transfer of shared services functions from UBS AG to UBS Business Solutions AG in 2017

## Transfer of shared services functions to UBS Business Solutions AG

In 2017, UBS transferred shared services functions in Switzerland and the UK from UBS AG to UBS Business Solutions AG, which is a wholly owned subsidiary of UBS Group AG. UBS Business Solutions AG charges other legal entities within the Group for services provided, including a markup on costs incurred. The transfer did not have a material effect on the UBS Group AG consolidated financial statements. However, this transfer of shared services within the Group resulted in a decrease in operating profit before tax for UBS AG consolidated of approximately CHF 0.1 billion under International Financial Reporting Standards (IFRS) in 2017. This transfer to UBS Business Solutions AG had no effect on the reported results of the business divisions. The effect of the transfer on the risk-weighted assets (RWA) and leverage ratio denominator (LRD) of UBS AG consolidated was not material.

During 2017, UBS also completed the transfer of the shared services employees in the US to the US service company, UBS Business Solutions US LLC. This transfer did not have an effect on the UBS Group AG and UBS AG consolidated financial statements or on the reported results of the business divisions.

- Refer to the "Our evolution" section of this report for more information

## UBS AG (consolidated) key figures

CHF million, except where indicated	As of or for the year ended		
	31.12.17	31.12.16	31.12.15
<b>Results</b>			
Operating income	29,479	28,421	30,605
Operating expenses	24,481	24,352	25,198
Operating profit / (loss) before tax	4,998	4,069	5,407
Net profit / (loss) attributable to shareholders	845	3,207	6,235
<b>Key performance indicators<sup>1</sup></b>			
<b>Profitability</b>			
Return on tangible equity (%)	2.0	6.9	13.5
Cost / income ratio (%)	82.7	85.6	82.0
<b>Growth</b>			
Net profit growth (%)	(73.7)	(48.6)	78.0
Net new money growth for combined wealth management businesses (%) <sup>2</sup>	2.1	2.1	2.2
<b>Resources</b>			
Common equity tier 1 capital ratio (fully applied, %) <sup>3</sup>	14.0	14.5	15.4
Common equity tier 1 leverage ratio (fully applied, %) <sup>3</sup>	3.7	3.7	3.6
Going concern leverage ratio (fully applied, %) <sup>4</sup>	4.2	4.2	
<b>Additional information</b>			
<b>Profitability</b>			
Return on equity (%)	1.6	5.9	11.7
Return on risk-weighted assets, gross (%) <sup>5</sup>	12.8	13.2	14.3
Return on leverage ratio denominator, gross (%) <sup>5</sup>	3.4	3.2	
<b>Resources</b>			
Total assets	916,363	935,353	943,256
Equity attributable to shareholders	50,718	53,662	55,248
Common equity tier 1 capital (fully applied) <sup>3</sup>	33,240	32,447	32,042
Common equity tier 1 capital (phase-in) <sup>3</sup>	36,042	39,474	41,516
Risk-weighted assets (fully applied) <sup>3</sup>	236,606	223,232	208,186
Common equity tier 1 capital ratio (phase-in, %) <sup>3</sup>	15.2	17.5	19.5
Going concern capital ratio (fully applied, %) <sup>4</sup>	15.6	16.3	
Going concern capital ratio (phase-in, %) <sup>4</sup>	19.5	22.6	
Going concern loss-absorbing capacity ratio (fully applied, %) <sup>4</sup>	15.8	13.3	
Leverage ratio denominator (fully applied) <sup>3</sup>	887,189	870,942	898,251
Going concern leverage ratio (phase-in, %) <sup>4</sup>	5.2	5.8	
Going concern leverage ratio (fully applied, %) <sup>4</sup>	4.2	3.4	
<b>Other</b>			
Invested assets (CHF billion) <sup>6,7</sup>	3,179	2,810	2,678
Personnel (full-time equivalents) <sup>8</sup>	46,009	56,208	58,131

<sup>1</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>2</sup> Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. <sup>3</sup> Based on the Swiss systemically relevant bank (SRB) framework. Refer to the "Capital management" section of this report for more information. <sup>4</sup> Based on the revised Swiss SRB framework that became effective on 1 July 2016. Refer to the "Capital management" section of this report for more information. <sup>5</sup> Calculated as operating income before credit loss / average fully applied risk-weighted assets and average fully applied leverage ratio denominator, respectively. <sup>6</sup> Includes invested assets for Personal & Corporate Banking. <sup>7</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively. <sup>8</sup> As of 31 December 2017, the breakdown of personnel by business division and Corporate Center unit was: Wealth Management: 9,648; Wealth Management Americas: 13,479; Personal & Corporate Banking: 5,034; Asset Management: 2,312; Investment Bank: 4,633; Corporate Center – Services: 10,707; Corporate Center – Group ALM: 143; Corporate Center – Non-core and Legacy Portfolio: 52.

### Events subsequent to the publication of the unaudited fourth quarter 2017 report

The 2017 results and the balance sheet as of 31 December 2017 differ from those presented in the unaudited fourth quarter 2017 report published on 22 January 2018 as a result of events adjusted for after the balance sheet date. Provisions for litigation, regulatory and similar matters increased, which reduced 2017 operating profit before tax by CHF 141 million and 2017 net profit attributable to shareholders by CHF 112 million.

## Comparison UBS Group AG (consolidated) versus UBS AG (consolidated)

CHF million, except where indicated	As of or for the year ended 31.12.17			As of or for the year ended 31.12.16		
	UBS Group AG (consolidated)	UBS AG (consolidated)	Difference (absolute)	UBS Group AG (consolidated)	UBS AG (consolidated)	Difference (absolute)
<b>Income statement</b>						
Operating income	29,067	29,479	(412)	28,320	28,421	(101)
Operating expenses	23,800	24,481	(681)	24,230	24,352	(122)
Operating profit / (loss) before tax	5,268	4,998	270	4,090	4,069	21
of which: Wealth Management	2,295	2,284	11	1,948	1,936	12
of which: Wealth Management Americas	1,208	1,171	37	1,107	1,081	26
of which: Personal & Corporate Banking	1,578	1,579	(1)	1,760	1,761	(1)
of which: Asset Management	578	578	0	452	451	1
of which: Investment Bank	1,249	1,198	51	1,004	962	42
of which: Corporate Center	(1,640)	(1,811)	171	(2,181)	(2,121)	(60)
of which: Services	(914)	(1,113)	199	(849)	(826)	(23)
of which: Group ALM	(322)	(296)	(26)	(218)	(182)	(36)
of which: Non-core and Legacy Portfolio	(403)	(403)	0	(1,114)	(1,113)	(1)
Net profit / (loss)	1,128	921	207	3,286	3,288	(2)
of which: net profit / (loss) attributable to shareholders	1,053	845	208	3,204	3,207	(3)
of which: net profit / (loss) attributable to preferred noteholders		72	(72)		78	(78)
of which: net profit / (loss) attributable to non-controlling interests	76	4	72	82	4	78
<b>Statement of comprehensive income</b>						
Other comprehensive income	(911)	(898)	(13)	(1,116)	(1,115)	(1)
of which: attributable to shareholders	(1,263)	(1,250)	(13)	(1,386)	(1,386)	0
of which: attributable to preferred noteholders		351	(351)		271	(271)
of which: attributable to non-controlling interests	352	1	351	271	0	271
Total comprehensive income	218	23	195	2,170	2,173	(3)
of which: attributable to shareholders	(210)	(404)	194	1,817	1,820	(3)
of which: attributable to preferred noteholders		423	(423)		349	(349)
of which: attributable to non-controlling interests	428	5	423	352	3	349
<b>Balance sheet</b>						
Total assets	915,642	916,363	(721)	935,016	935,353	(337)
Total liabilities	864,371	865,588	(1,217)	880,714	881,009	(295)
Total equity	51,271	50,775	496	54,302	54,343	(41)
of which: equity attributable to shareholders	51,214	50,718	496	53,621	53,662	(41)
of which: equity attributable to preferred noteholders		0	0		642	(642)
of which: equity attributable to non-controlling interests	57	57	0	682	40	642
<b>Capital information</b>						
Common equity tier 1 capital (fully applied)	32,671	33,240	(569)	30,693	32,447	(1,754)
Common equity tier 1 capital (phase-in)	35,494	36,042	(548)	37,788	39,474	(1,686)
Going concern capital (fully applied)	41,911	36,906	5,005	39,844	36,294	3,550
Going concern capital (phase-in)	51,748	46,286	5,462	55,593	51,084	4,509
Risk-weighted assets (fully applied)	237,494	236,606	888	222,677	223,232	(555)
Common equity tier 1 capital ratio (fully applied, %)	13.8	14.0	(0.2)	13.8	14.5	(0.7)
Common equity tier 1 capital ratio (phase-in, %)	14.9	15.2	(0.3)	16.8	17.5	(0.7)
Going concern capital ratio (fully applied, %)	17.6	15.6	2.0	17.9	16.3	1.6
Going concern capital ratio (phase-in, %)	21.7	19.5	2.2	24.7	22.6	2.1
Going concern loss-absorbing capacity ratio (fully applied, %)	15.3	15.8	(0.5)	13.2	13.3	(0.1)
Leverage ratio denominator (fully applied)	886,116	887,189	(1,073)	870,470	870,942	(472)
Common equity tier 1 leverage ratio (fully applied, %)	3.7	3.7	0.0	3.5	3.7	(0.2)
Going concern leverage ratio (fully applied, %)	4.7	4.2	0.5	4.6	4.2	0.4
Going concern leverage ratio (phase-in, %)	5.8	5.2	0.6	6.4	5.8	0.6
Going concern leverage ratio (fully applied, %)	4.1	4.2	(0.1)	3.4	3.4	0.0

## **Management's report on internal control over financial reporting**

### **Management's responsibility for internal control over financial reporting**

The Board of Directors and management of UBS AG are responsible for establishing and maintaining adequate internal control over financial reporting. UBS AG's internal control over financial reporting is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with IFRS as issued by the IASB.

UBS AG's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation and fair presentation of financial statements, and that receipts and expenditures of the company are being made only in accordance with authorizations of UBS AG management; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### **Management's assessment of internal control over financial reporting as of 31 December 2017**

UBS AG management has assessed the effectiveness of UBS AG's internal control over financial reporting as of 31 December 2017 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013 Framework). Based on this assessment, management believes that, as of 31 December 2017, UBS AG's internal control over financial reporting was effective.

The effectiveness of UBS AG's internal control over financial reporting as of 31 December 2017 has been audited by Ernst & Young Ltd, UBS AG's independent registered public accounting firm, as stated in their report appearing on page 463, which expresses an unqualified opinion on the effectiveness of UBS AG's internal control over financial reporting as of 31 December 2017.





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## Report of Independent Registered Public Accounting Firm

### To the Shareholders and the Board of Directors of UBS AG

#### Opinion on Internal Control over Financial Reporting

We have audited UBS AG and subsidiaries' internal control over financial reporting as of 31 December 2017, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). In our opinion, UBS AG and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of 31 December 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of UBS AG and subsidiaries as of 31 December, 2017 and 2016, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended 31 December 2017, and the related notes and our report dated 8 March 2018 expresses an unqualified opinion thereon.

#### Basis for Opinion

UBS AG's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on UBS AG's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

#### Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Ernst & Young Ltd  
Basel, 8 March 2018



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## Report of Independent Registered Public Accounting Firm

### To the Shareholders and the Board of Directors of UBS AG

#### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UBS AG and subsidiaries (the Company) as of 31 December 2017 and 2016, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, for each of the three years in the period ended 31 December 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of UBS AG and subsidiaries as of December 31, 2017 and 2016, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2017, in conformity with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), UBS AG and subsidiaries' internal control over financial reporting as of 31 December 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated 8 March 2018, expressed an unqualified opinion thereon.

#### Basis for Opinion

These financial statements are the responsibility of the Company's Board of Directors. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Ernst & Young Ltd

We have served as the Company's auditor since 1998.  
Basel, 8 March 2018



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To the General Meeting of  
UBS AG, Zurich and Basel

Basel, 8 March 2018

## **Statutory auditor's report on the audit of the consolidated financial statements**

### **Opinion**

We have audited the consolidated financial statements of UBS AG and its subsidiaries (the Group), which comprise the consolidated balance sheets as of 31 December 2017 and 2016, and the consolidated income statements, statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended 31 December 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies in note 1.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended 31 December 2017 in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

### **Basis for opinion**

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Key audit matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

### Deferred tax asset valuation

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**Area of focus** We focused on this area because there is significant judgment exercised when determining the valuation of Deferred Tax Assets (“DTAs”) given the significant amount of tax net operating loss carryforwards (net operating losses or “NOLs”) the Group has available and the impact of the Tax Cuts and Jobs Act (“TCJA”) in the United States. DTAs can be recognized to the extent it is probable they will be utilized to offset taxable profits within the loss carryforward period or be used against deductible temporary differences. The estimate of future taxable income is based on the strategic plan which is then allocated to the tax-paying entities in the various jurisdictions. The recognition of deferred tax assets is therefore sensitive to changes in the strategic plan as well as to assumptions made in the allocation of future taxable income.

See note 8 to the financial statements.

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**Our audit  
response**

We obtained an understanding of the TCJA. We evaluated the design and tested the operational effectiveness of the Group’s key controls over accounting for the impact of the TCJA. We assessed the impact that the reduction in the federal corporate rate had on deferred taxes and the Group’s disclosures in note 8.

We obtained an understanding, evaluated the design and tested the operational effectiveness of the Group’s key controls over the recognition and measurement of DTAs and the assumptions used in estimating the Group’s future taxable income.

We assessed the completeness and accuracy of the data used for the estimations of future taxable income. This included auditing of computations of the models applied to the recognition process for DTAs and testing the control framework around the models.

We involved EY specialists to assess the key economic assumptions embedded in the strategic plan. We compared key inputs used by the Group to forecast future taxable income to externally available data, the Group’s historical data and performance and assessed the sensitivity of the outcomes to reasonably possible changes in assumptions.

We assessed the completeness and accuracy of the data used in the determination of the legal entity allocation, the assumptions applied by the Group, and the accuracy of the computation of the legal entity allocations.

We also assessed whether the Group’s disclosure regarding the application of judgment in estimating recognized and unrecognized DTAs appropriately reflects the Group’s deferred tax position (within note 8).

### Legal provision & contingencies

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**Area of focus** We focused on this area because the Group operates in a legal and regulatory environment that is exposed to significant litigation and similar risks arising from disputes and regulatory proceedings. Such matters are subject to many uncertainties and the outcome may be difficult to predict. These uncertainties inherently affect the amount and timing of potential outflows with respect to the provisions which have been established and other contingent liabilities. Overall, the legal provision represents the Group's best estimate for existing legal matters that have a probable and estimable impact on the Group's financial position.

See note 20 to the financial statements.

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**Our audit response** We obtained an understanding, evaluated the design and tested the operational effectiveness of the Group's key controls over the legal provision and contingencies process.

We assessed the methodologies on which the provision amounts are based, recalculated the provisions, and tested the completeness and accuracy of the underlying information. We read the legal analyses supporting the judgmental aspects impacted by legal interpretations. We obtained correspondence directly from external legal counsel to corroborate the information provided by the Group and followed up directly with external counsel as deemed necessary.

We also assessed the Group's provisions and contingent liabilities disclosure (within note 20).

### IT Controls relevant to financial reporting

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**Area of focus** We focused on this area because the Group is highly dependent on its IT systems for business processes and financial reporting. The Group continues to invest in its IT systems to meet client needs and business requirements including the effectiveness of its logical access and change management IT controls.

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**Our audit response** In assessing the reliability of electronic data processing, we included specialized IT auditors as part of our audit team. Our audit procedures focused on the IT infrastructure and applications relevant to financial reporting including evaluation of the design and testing of the operating effectiveness of key IT general controls and IT automated controls.

Our audit procedures related to logical access included testing of user access management, privileged user access, periodic access right recertifications and user authentication controls.

### **Valuation of complex or illiquid trading portfolio assets and liabilities, financial assets and liabilities and derivative financial instruments held at fair value**

**Area of focus** We focused on this area because of the complexity and judgments and assumptions over the fair valuation of financial assets and liabilities with significant unobservable inputs.

We have continued to focus on market developments in fair value methodologies and specifically on the Group's higher estimation uncertainty ("HEU") products, Credit Valuation Adjustment ("CVA") / and Funding Valuation Adjustment ("FVA").

See note 22 to the financial statements.

**Our audit response** We obtained an understanding, evaluated the design and tested the operating effectiveness of the key controls over the financial instrument valuation processes, including controls over market data inputs into valuation models, model governance, and valuation adjustments.

We tested a sample of the valuation models and the inputs used in those models, using a variety of techniques, including comparing inputs to available market data.

We selected a sample of positions and independently determined estimated values and compared the values to the Group's recorded values.

In addition, we evaluated the methodology and inputs used by the Group in determining funding and credit fair value adjustments on uncollateralized derivatives and fair value option liabilities.

We also assessed the Group's disclosure (within note 22).

### **Other information in the annual report**

The Board of Directors is responsible for the other information in the Annual Report. The other information comprises all information included in the Annual Report, but does not include the consolidated financial statements, the unconsolidated financial statements of UBS AG, the compensation report (pages 278–281 and page 304), disclosures denoted with an audited "signpost", and our auditor's report thereon.

Our opinions on the consolidated financial statements, the standalone financial statements of UBS AG and the compensation report do not cover the other information in the annual report and we do not express any form of assurance conclusion thereon other than the disclosures denoted with an audited "signpost".

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the Annual Report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### **Responsibility of the Board of Directors for the consolidated financial statements**

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

#### **Auditor's responsibilities for the audit of the consolidated financial statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs, and Swiss Auditing Standards and will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

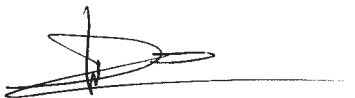
A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: <http://www.expertsuisse.ch/en/audit-report-for-public-companies>. This description forms part of our auditor's report.

#### **Report on other legal and regulatory requirements**

In accordance with article 728a paragraph 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements in accordance with the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd



Marie-Laure Delarue  
Licensed Audit Expert  
(Auditor in Charge)



Ira S. Fitlin  
Certified Public Accountant (U.S.)

# UBS AG consolidated financial statements

## Primary financial statements

Audited I

### Income statement

<i>CHF million</i>	Note	For the year ended		
		31.12.17	31.12.16	31.12.15
Interest income	3	14,208	13,782	13,178
Interest expense	3	(7,728)	(7,399)	(6,449)
Net interest income	3	6,480	6,383	6,729
Credit loss (expense) / recovery	11	(128)	(37)	(117)
Net interest income after credit loss expense		6,352	6,346	6,612
Net fee and commission income	4	17,214	16,447	17,184
Net trading income	3	4,974	4,943	5,696
Other income	5	939	685	1,112
Total operating income		29,479	28,421	30,605
Personnel expenses	6	14,673	15,591	15,954
General and administrative expenses	7	8,811	7,690	8,219
Depreciation and impairment of property, equipment and software	14	928	980	918
Amortization and impairment of intangible assets	15	70	91	107
Total operating expenses		24,481	24,352	25,198
Operating profit / (loss) before tax		4,998	4,069	5,407
Tax expense / (benefit)	8	4,077	781	(908)
Net profit / (loss)		921	3,288	6,314
Net profit / (loss) attributable to preferred noteholders		72	78	77
Net profit / (loss) attributable to non-controlling interests		4	4	3
<b>Net profit / (loss) attributable to shareholders</b>		<b>845</b>	<b>3,207</b>	<b>6,235</b>



## Statement of comprehensive income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Comprehensive income attributable to shareholders</b>			
Net profit / (loss)	845	3,207	6,235
<b>Other comprehensive income that may be reclassified to the income statement</b>			
<b>Foreign currency translation</b>			
Foreign currency translation movements, before tax	(753)	251	(174)
Foreign exchange amounts reclassified to the income statement from equity	21	126	(90)
Income tax relating to foreign currency translation movements	196	(84)	(1)
Subtotal foreign currency translation, net of tax	(535)	293	(266)
<b>Financial assets available for sale</b>			
Net unrealized gains / (losses) on financial assets available for sale, before tax	99	240	180
Impairment charges reclassified to the income statement from equity	15	5	1
Realized gains reclassified to the income statement from equity	(206)	(372)	(298)
Realized losses reclassified to the income statement from equity	14	25	45
Income tax relating to net unrealized gains / (losses) on financial assets available for sale	(7)	28	8
Subtotal financial assets available for sale, net of tax	(86)	(73)	(64)
<b>Cash flow hedges</b>			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	45	246	550
Net realized (gains) / losses reclassified to the income statement from equity	(826)	(1,082)	(1,199)
Income tax relating to cash flow hedges	160	170	131
Subtotal cash flow hedges, net of tax	(621)	(666)	(518)
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>(1,242)</b>	<b>(447)</b>	<b>(848)</b>
<b>Other comprehensive income that will not be reclassified to the income statement</b>			
<b>Defined benefit plans</b>			
Gains / (losses) on defined benefit plans, before tax	299	(876)	322
Income tax relating to defined benefit plans	6	52	(19)
Subtotal defined benefit plans, net of tax	305	(824)	304
<b>Own credit on financial liabilities designated at fair value</b>			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(312)	(120)	
Income tax relating to own credit on financial liabilities designated at fair value	(1)	5	
Subtotal own credit on financial liabilities designated at fair value, net of tax	(313)	(115)	
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>(8)</b>	<b>(939)</b>	<b>304</b>
<b>Total other comprehensive income</b>	<b>(1,250)</b>	<b>(1,386)</b>	<b>(545)</b>
<b>Total comprehensive income attributable to shareholders</b>	<b>(404)</b>	<b>1,820</b>	<b>5,690</b>

Table continues on the next page.

## Statement of comprehensive income (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Comprehensive income attributable to preferred noteholders</b>			
Net profit / (loss)	72	78	77
<b>Other comprehensive income that will not be reclassified to the income statement</b>			
Foreign currency translation movements, before tax	351	271	(59)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	351	271	(59)
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>351</b>	<b>271</b>	<b>(59)</b>
<b>Total comprehensive income attributable to preferred noteholders</b>	<b>423</b>	<b>349</b>	<b>18</b>
<b>Comprehensive income attributable to non-controlling interests</b>			
Net profit / (loss)	4	4	3
<b>Other comprehensive income that will not be reclassified to the income statement</b>			
Foreign currency translation movements, before tax	1	0	(2)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	1	0	(2)
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>1</b>	<b>0</b>	<b>(2)</b>
<b>Total comprehensive income attributable to non-controlling interests</b>	<b>5</b>	<b>3</b>	<b>1</b>
<b>Total comprehensive income</b>			
Net profit / (loss)	921	3,288	6,314
<b>Other comprehensive income</b>	<b>(898)</b>	<b>(1,115)</b>	<b>(606)</b>
<i>of which: other comprehensive income that may be reclassified to the income statement</i>	<i>(1,242)</i>	<i>(447)</i>	<i>(848)</i>
<i>of which: other comprehensive income that will not be reclassified to the income statement</i>	<i>344</i>	<i>(669)</i>	<i>243</i>
<b>Total comprehensive income</b>	<b>23</b>	<b>2,173</b>	<b>5,709</b>

## Balance sheet

CHF million	Note	31.12.17	31.12.16
<b>Assets</b>			
Cash and balances with central banks		87,775	107,767
Due from banks	10, 11	13,693	13,125
Cash collateral on securities borrowed	24	12,393	15,111
Reverse repurchase agreements	24	77,240	66,246
Trading portfolio assets	22	130,807	96,661
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	23	35,363	30,260
Positive replacement values	12, 22, 24	118,229	158,411
Cash collateral receivables on derivative instruments	24	23,434	26,664
Loans	10, 11	321,718	307,004
Financial assets designated at fair value	22, 24, 25	58,556	65,024
Financial assets available for sale	13, 22	8,665	15,676
Financial assets held to maturity	13	9,166	9,289
Investments in associates	28	1,018	963
Property, equipment and software	14	7,985	8,297
Goodwill and intangible assets	15	6,398	6,556
Deferred tax assets	8	9,783	13,144
Other assets	16	29,505	25,412
<b>Total assets</b>		<b>916,363</b>	<b>935,353</b>
<b>Liabilities</b>			
Due to banks	17	7,533	10,645
Cash collateral on securities lent	24	1,789	2,818
Repurchase agreements	24	15,255	6,612
Trading portfolio liabilities	22	30,463	22,825
Negative replacement values	12, 22, 24	116,134	153,810
Cash collateral payables on derivative instruments	24	30,247	35,472
Due to customers	17	447,141	450,199
Financial liabilities designated at fair value	18, 22, 24	54,202	55,017
Debt issued	19	104,749	78,998
Provisions	20	3,084	4,169
Other liabilities	8, 21	54,990	60,443
<b>Total liabilities</b>		<b>865,588</b>	<b>881,009</b>
<b>Equity</b>			
Share capital		386	386
Share premium		26,966	29,505
Retained earnings		29,102	28,265
Other comprehensive income recognized directly in equity, net of tax		(5,736)	(4,494)
<b>Equity attributable to shareholders</b>		<b>50,718</b>	<b>53,662</b>
Equity attributable to preferred noteholders		0	642
Equity attributable to non-controlling interests		57	40
<b>Total equity</b>		<b>50,775</b>	<b>54,343</b>
<b>Total liabilities and equity</b>		<b>916,363</b>	<b>935,353</b>

## Statement of changes in equity

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
<b>Balance as of 1 January 2015</b>	<b>384</b>	<b>32,057</b>	<b>(37)</b>	<b>22,902</b>
Issuance of share capital	1			
Acquisition of treasury shares			(292)	
Premium on shares issued and warrants exercised		290		
Tax (expense) / benefit		9		
Dividends		(2,914)		(8)
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		35	328	
<b>Total comprehensive income for the year</b>				<b>6,538</b>
<i>of which: net profit / (loss)</i>				<i>6,235</i>
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				<i>304</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
<b>Balance as of 31 December 2015</b>	<b>386</b>	<b>29,477</b>	<b>0</b>	<b>29,433</b>
Issuance of share capital				
Premium on shares issued and warrants exercised		4		
Tax (expense) / benefit		25		
Dividends				(3,434)
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(2)		(1)
<b>Total comprehensive income for the year</b>				<b>2,267</b>
<i>of which: net profit / (loss)</i>				<i>3,207</i>
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				<i>(824)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>				<i>(115)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				

Other comprehensive income recognized directly in equity, net of tax <sup>1</sup>	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
<b>(3,199)</b>	<i>(5,591)</i>	<i>236</i>	<i>2,156</i>	<b>52,108</b>	<b>2,013</b>	<b>45</b>	<b>54,165</b>
				1			1
				(292)			(292)
				290			290
				9			9
				(2,922)	(77)	(5)	(3,004)
				0	1		1
				364		(1)	363
(848)	(266)	(64)	(518)	5,690	18	1	5,709
				6,235	77	3	6,314
(848)	(266)	(64)	(518)	(848)			(848)
				304			304
				0	(59)	(2)	(61)
<b>(4,047)</b>	<i>(5,857)</i>	<i>172</i>	<i>1,638</i>	<b>55,248</b>	<b>1,954</b>	<b>41</b>	<b>57,243</b>
				0			0
				4			4
				25			25
				(3,434)	(78)	(5)	(3,517)
				0	(1,583)		(1,583)
				(3)		0	(2)
(447)	293	(73)	(666)	1,820	349	3	2,173
				3,207	78	4	3,288
(447)	293	(73)	(666)	(447)			(447)
				(824)			(824)
				(115)			(115)
				0	271	0	271

### Statement of changes in equity (continued)

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
<b>Balance as of 31 December 2016</b>	<b>386</b>	<b>29,505</b>	<b>0</b>	<b>28,265</b>
Issuance of share capital				
Premium on shares issued and warrants exercised		6		
Tax (expense) / benefit		16		
Dividends		(2,250)		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(311) <sup>2</sup>		
<b>Total comprehensive income for the year</b>				<b>837</b>
<i>of which: net profit / (loss)</i>				<i>845</i>
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				<i>305</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>				<i>(313)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
<b>Balance as of 31 December 2017</b>	<b>386</b>	<b>26,966</b>	<b>0</b>	<b>29,102</b>

<sup>1</sup> Excludes defined benefit plans and own credit that are recorded directly in retained earnings. <sup>2</sup> Includes a CHF 307 million reduction related to the transfer of shared services functions in Switzerland from UBS AG to UBS Business Solutions AG, a wholly owned subsidiary of UBS Group AG. Refer to Note 30 for more information.

Other comprehensive income recognized directly in equity, net of tax <sup>1</sup>	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(4,494)	(5,564)	98	972	53,662	642	40	54,343
				0			0
				6			6
				16			16
				(2,250)	(72)	(4)	(2,327)
				0	(993)		(993)
				(311)		17	(294)
(1,242)	(535)	(86)	(621)	(404)	423	5	23
				845	72	4	921
(1,242)	(535)	(86)	(621)	(1,242)			(1,242)
				305			305
				(313)			(313)
				0	351	1	352
(5,736)	(6,099)	12	351	50,718	0	57	50,775

### **UBS AG shares issued and treasury shares held**

As of 31 December 2017, shares issued by UBS AG totaled 3,858,408,466 (31 December 2016: 3,858,408,466 shares).

No treasury shares were held as of 31 December 2017 and as of 31 December 2016.

### **Conditional share capital**

As of 31 December 2017, UBS AG's share capital could have been increased through the issuance of 136,200,312 shares upon exercise of employee options.

Additional conditional capital up to a maximum number of 380,000,000 shares was available as of 31 December 2017 for conversion rights and warrants granted in connection with the issuance of bonds or similar financial instruments.



## Statement of cash flows

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Cash flow from / (used in) operating activities</b>			
Net profit / (loss)	921	3,288	6,314
<b>Non-cash items included in net profit and other adjustments:</b>			
Depreciation and impairment of property, equipment and software	928	980	918
Amortization and impairment of intangible assets	70	91	107
Credit loss expense / (recovery)	128	37	117
Share of net profits of associates / joint ventures and impairment of associates	(68)	(106)	(169)
Deferred tax expense / (benefit)	3,248	2	(1,614)
Net loss / (gain) from investing activities	(203)	(1,176)	(934)
Net loss / (gain) from financing activities	2,132	9,647	(1,654)
Other net adjustments	(519)	(300)	3,628
<b>Net change in operating assets and liabilities:</b>			
Due from / to banks	(3,184)	(1,183)	1,768
Cash collateral on securities borrowed and reverse repurchase agreements	(7,654)	7,933	(2,712)
Cash collateral on securities lent and repurchase agreements	7,432	(6,637)	(2,909)
Trading portfolio and replacement values	(21,931)	6,024	6,853
Financial assets designated at fair value	7,316	(60,658)	(1,446)
Cash collateral on derivative instruments	(2,479)	(4,169)	3,285
Loans	(15,411)	3,740	841
Due to customers	(11,187)	33,925	(17,362)
Other assets, provisions and other liabilities	(10,417)	(8,204)	7,516
Income taxes paid, net of refunds	(992)	(649)	(551)
<b>Net cash flow from / (used in) operating activities</b>	<b>(51,872)</b>	<b>(17,413)</b>	<b>1,997</b>
<b>Cash flow from / (used in) investing activities</b>			
Purchase of subsidiaries, associates and intangible assets	(102)	(26)	(13)
Disposal of subsidiaries, associates and intangible assets <sup>1</sup>	336	93	477
Purchase of property, equipment and software	(1,500)	(1,746)	(1,841)
Disposal of property, equipment and software	213	209	547
Purchase of financial assets available for sale	(8,448)	(7,271)	(101,189)
Disposal and redemption of financial assets available for sale	14,917	54,097	93,584
Net (purchase) / redemption of financial assets held to maturity	(77)	(8,996)	
<b>Net cash flow from / (used in) investing activities</b>	<b>5,338</b>	<b>36,359</b>	<b>(8,434)</b>

Table continues on the next page.

## Statement of cash flows (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Cash flow from / (used in) financing activities</b>			
Net short-term debt issued / (repaid)	24,141	5,440	(6,404)
Distributions paid on UBS AG shares	(2,250)	(3,434)	(2,626)
Issuance of long-term debt, including financial liabilities designated at fair value	49,506	33,453	47,790
Repayment of long-term debt, including financial liabilities designated at fair value	(43,299)	(34,081)	(44,221)
Dividends paid and repayments of preferred notes	(776)	(1,366)	(108)
Net changes in non-controlling interests	(5)	(5)	(5)
<b>Net cash flow from / (used in) financing activities</b>	<b>27,317</b>	<b>6</b>	<b>(5,573)</b>
<b>Total cash flow</b>			
Cash and cash equivalents at the beginning of the year	121,107	102,962	116,715
Net cash flow from / (used in) operating, investing and financing activities	(19,216)	18,952	(12,011)
Effects of exchange rate differences on cash and cash equivalents	264	(807)	(1,742)
<b>Cash and cash equivalents at the end of the year<sup>2</sup></b>	<b>102,154</b>	<b>121,107</b>	<b>102,962</b>
<i>of which: cash and balances with central banks</i>	87,700	107,715	91,306
<i>of which: due from banks</i>	12,406	11,927	10,732
<i>of which: money market paper<sup>3</sup></i>	2,049	1,465	924

### Additional information

Net cash flow from / (used in) operating activities includes:

Interest received in cash	12,457	12,223	11,144
Interest paid in cash	6,627	6,141	5,267
Dividends on equity investments, investment funds and associates received in cash <sup>4</sup>	1,790	1,595	2,120

<sup>1</sup> Includes dividends received from associates. <sup>2</sup> CHF 2,434 million, CHF 2,662 million and CHF 3,963 million of cash and cash equivalents (mainly reflected in Due from banks) were restricted as of 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 23 for more information. <sup>3</sup> Money market paper is included in the balance sheet under Trading portfolio assets (31 December 2017: CHF 131 million, 31 December 2016: CHF 75 million, 31 December 2015: CHF 795 million), Financial assets available for sale (31 December 2017: CHF 23 million, 31 December 2016: CHF 430 million, 31 December 2015: CHF 129 million) and Financial assets designated at fair value (31 December 2017: CHF 1,894 million, 31 December 2016: CHF 959 million, 31 December 2015: CHF 0 million). <sup>4</sup> Includes dividends received from associates (2017: CHF 51 million, 2016: CHF 50 million, 2015: CHF 114 million) reported within Cash flow from / (used in) investing activities.

## Changes in liabilities arising from financing activities

CHF million	Debt issued	of which: short-term	of which: long-term	Financial liabilities designated at fair value	Funding from	Total
					UBS Group AG and its subsidiaries <sup>2</sup>	
<b>Balance as of 1 January 2017</b>	78,998	26,178	52,820	55,017	24,632	158,647
Cash flows	25,534	24,141	1,393	(5,556)	10,371	30,348
Non-cash changes	217	634	(417)	4,740	(254)	4,704
<i>of which: foreign currency translation</i>	561	634	(73)	593	(138)	1,016
<i>of which: fair value changes</i>				4,147		4,147
<i>of which: other</i>	(344) <sup>1</sup>	0	(344) <sup>1</sup>	0	(115) <sup>1</sup>	(459)
<b>Balance as of 31 December 2017</b>	<b>104,749</b>	<b>50,953</b>	<b>53,796</b>	<b>54,202</b>	<b>34,749</b>	<b>193,700</b>

<sup>1</sup> Includes the effect of fair value hedges on long-term debt issued. Refer to Note 1a item k and Note 19 for more information. <sup>2</sup> Represents Group-internal funding obtained from UBS Group AG and UBS Group Funding (Switzerland) AG that is reported in the balance sheet line Due to customers.

# Notes to the UBS AG consolidated financial statements

## Note 1 Summary of significant accounting policies

### a) Significant accounting policies

This Note describes the significant accounting policies applied in the preparation of the consolidated financial statements (the "Financial Statements") of UBS AG and its subsidiaries ("UBS AG"). On 8 March 2018, the Financial Statements were authorized for issue by the Board of Directors.

#### Basis of accounting

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), and are presented in Swiss francs (CHF), which is also the functional currency of UBS AG's Head Office and its Swiss-based operations.

Disclosures provided in the "Risk, treasury and capital management" section of this report that are marked as audited form an integral part of the Financial Statements. These disclosures relate to requirements under IFRS 7, *Financial Instruments: Disclosures* and IAS 1, *Presentation of Financial Statements* and are not repeated in this section.

The accounting policies described in this Note have been applied consistently in all years presented unless otherwise stated in Note 1b.

#### Critical accounting estimates and judgments

Preparation of these Financial Statements under IFRS requires management to apply judgment and make estimates and assumptions that affect reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities, and may involve significant uncertainty at the time they are made. Such estimates and assumptions are based on the best available information. UBS AG regularly reassesses the estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and it updates them as necessary. Changes in

those estimates and assumptions may have a significant impact on the Financial Statements. Further, actual results may differ significantly from UBS AG's estimates, which could result in significant loss to it, beyond what it anticipated or provided for.

The following areas contain estimation uncertainty or require critical judgment and have a significant effect on the amounts recognized in the Financial Statements:

- fair value of financial instruments (refer to item 3f in this Note and to Note 22)
- allowances and provisions for credit losses (refer to item 3g in this Note and to Note 11)
- pension and other post-employment benefit plans (refer to item 7 in this Note and to Note 26)
- income taxes (refer to item 8 in this Note and to Note 8)
- goodwill (refer to item 11 in this Note and to Note 15)
- provisions and contingent liabilities (refer to item 12 in this Note and to Note 20)
- consolidation of structured entities (refer to item 1 in this Note and to Note 28).

#### 1) Consolidation

##### a. Consolidation principles

The Financial Statements comprise the financial statements of UBS AG and its subsidiaries, presented as a single economic entity, whereby intercompany transactions and balances have been eliminated. UBS AG consolidates all entities that it controls, including controlled structured entities (SEs), which is the case when it has (i) power over the relevant activities of the entity, (ii) exposure to an entity's variable returns and (iii) the ability to use its power to affect its own returns.

Where an entity is governed by voting rights, control is generally indicated by a direct shareholding of more than one-half of the voting rights.

## Note 1 Summary of significant accounting policies (continued)

In other cases, the assessment of control is more complex and requires greater use of judgment. Where UBS AG has an interest in an entity that absorbs variability, UBS AG considers whether it has power over the relevant activities of the entity that allows it to affect the variability of its returns. Consideration is given to all facts and circumstances to determine whether UBS AG has power over another entity; that is, the current ability to direct the relevant activities of an entity when decisions about those activities need to be made. Factors such as the purpose and design of the entity, rights held through contractual arrangements, such as call rights, put rights or liquidation rights, as well as potential decision-making rights are all considered in this assessment. Where UBS AG has power over the relevant activities, a further assessment is made to determine whether, through that power, it has the ability to affect its own returns by assessing whether power is held in a principal or agent capacity. Consideration is given to (i) the scope of decision-making authority, (ii) rights held by other parties, including removal or other participating rights, and (iii) exposure to variability, including remuneration, relative to total variability of the entity as well as whether that exposure is different from that of other investors. If, after review of these factors, UBS AG concludes that it can exercise its power to affect its own returns, the entity is consolidated.

Subsidiaries, including SEs, are consolidated from the date when control is obtained and are deconsolidated from the date when control ceases. Control, or the lack thereof, is reassessed if facts and circumstances indicate that there is a change to one or more of the elements required to establish that control is present.

→ Refer to Note 28 for more information

### b. Structured entities

UBS AG sponsors the formation of SEs and interacts with non-sponsored SEs for a variety of reasons, including allowing clients to obtain or be exposed to particular risk profiles, to provide funding or to sell or purchase credit risk. An SE is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such entities generally have a narrow and well-defined objective and include those historically referred to as special purpose entities, as well as some investment funds. UBS AG assesses whether an entity is an SE by considering the nature of the activities of the entity as well as the substance of voting or similar rights afforded to other parties, including investors and independent boards or directors. UBS AG considers rights such as the ability to liquidate the entity or remove the decision maker to be similar to voting rights when the holder has the substantive ability to exercise such rights without cause. In the absence of such rights or in cases where the existence of such rights cannot be fully established, the entity is considered to be an SE.

The classes of SEs with which UBS AG is involved include:

- *Securitization structured entities* are established to issue securities to investors that are backed by assets held by the SE and whereby (i) significant credit risk associated with the securitized exposures has been transferred to third parties and (ii) there is more than one risk position or tranche issued by the securitization vehicle in line with the Basel III securitization definition. All securitization entities are classified as SEs.
- *Client investment structured entities* are established predominantly for clients to invest in specific assets or risk exposures through purchasing notes issued by the SE, predominantly on a fixed-term basis. The SE may source assets via a transfer from UBS AG or through an external market transaction. In some cases, UBS AG may enter into derivatives with the SE to either align the cash flows of the entity with the investor's intended investment objective or to introduce other desired risk exposures. In certain cases, UBS AG may have interests in a third-party-sponsored SE to hedge specific risks or participate in asset-backed financing.
- *Investment fund structured entities* have a collective investment objective, are managed by an investment manager and are either passively managed, so that any decision making does not have a substantive effect on variability, or are actively managed and investors or their governing bodies do not have substantive voting or similar rights. UBS AG creates and sponsors a large number of funds in which it may have an interest through the receipt of variable management fees and / or a direct investment. In addition, UBS AG has interests in a number of funds created and sponsored by third parties, including exchange-traded funds and hedge funds, to hedge issued structured products.

When UBS AG does not consolidate an SE, but has an interest in an SE or has sponsored an SE, disclosures are provided on the nature of these interests and sponsorship activities.

### Critical accounting estimates and judgments

Each individual entity is assessed for consolidation in line with the aforementioned consolidation principles. The assessment of control can be complex and requires the use of significant judgment. As the nature and extent of UBS AG's involvement are unique to each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not.

→ Refer to Note 28 for more information

## Note 1 Summary of significant accounting policies (continued)

### 2) Segment reporting

As of 31 December 2017, UBS AG's businesses were organized globally into five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank, all of which were supported by Corporate Center. The five business divisions qualify as reportable segments for the purpose of segment reporting and, together with Corporate Center, reflect the management structure of UBS AG. Corporate Center – Non-core and Legacy Portfolio is managed and reported as a separate reportable segment within Corporate Center. Financial information about the five business divisions and Corporate Center (with its units: Services, Group Asset and Liability Management (Group ALM), Non-core and Legacy Portfolio) is presented separately in internal reporting to management.

UBS AG's internal accounting policies, which include management accounting policies and service level agreements, determine the revenues and expenses directly attributable to each reportable segment. Transactions between the reportable segments are carried out at internally agreed rates and are reflected in the operating results of the reportable segments. Revenue-sharing agreements are used to allocate external client revenues to reportable segments where several reportable segments are involved in the value creation chain. Commissions are credited to the reportable segments based on the corresponding client relationship. Total intersegment revenues for UBS AG are immaterial, as the majority of the revenues are allocated across the segments by means of revenue-sharing agreements. Net interest income is generally allocated to the reportable segments based on their balance sheet positions. Interest income earned from managing UBS AG's consolidated equity is allocated to the reportable segments based on average attributed equity. Assets and liabilities of the reportable segments are funded through and invested with Corporate Center – Group ALM, and the net interest margin is reflected in the results of each reportable segment.

Segment assets are based on a third-party view and do not include intercompany balances. This view is in line with internal reporting to management. Certain assets managed centrally by Corporate Center – Services and Corporate Center – Group ALM may be allocated to other segments on a basis different to that on which the corresponding costs or revenues are allocated. For example, certain assets that are reported in Corporate Center – Services or Corporate Center – Group ALM may be retained on the balance sheet of these components of Corporate Center notwithstanding that the costs or revenues associated with these assets may be entirely or partly allocated to the segments.

Similarly, certain assets are reported in the business divisions, whereas the corresponding costs or revenues are entirely or partly allocated to Corporate Center – Services and Corporate Center – Group ALM.

Non-current assets disclosed for segment reporting purposes represent assets that are expected to be recovered more than twelve months after the reporting date, excluding financial instruments, deferred tax assets, post-employment benefits and rights arising under insurance contracts.

→ **Refer to Notes 1c and 2 for more information**

### 3) Financial instruments

#### a. Recognition

UBS AG recognizes financial instruments when it becomes a party to the contractual provisions of the instrument. UBS AG applies settlement date accounting to all regular way purchases and sales of financial instruments.

In transactions in which UBS AG acts as a transferee, to the extent that the transfer of a financial asset does not qualify for derecognition by the transferor, UBS AG does not recognize the transferred asset as its asset.

UBS AG also acts in a fiduciary capacity, which results in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless the recognition criteria are satisfied, these assets are not recognized on UBS AG's balance sheet. Consequently, the related income is excluded from these Financial Statements.

Client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, UBS AG neither obtains benefits from nor controls the client cash balances.

#### b. Classification, measurement and presentation

Upon initial recognition, UBS records financial instruments at fair value plus, for financial instruments not measured at fair value through profit or loss, directly attributable transaction costs. After initial recognition, UBS AG classifies, measures and presents its financial assets and liabilities in accordance with IAS 39, *Financial Instruments: Recognition and Measurement* as described in the following table.

→ **Refer to Note 25a for an overview of financial assets and liabilities by IAS 39 category**

→ **Refer to the balance sheet for references to Notes that provide information on the composition of individual financial asset and liability categories**

## Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
<b>Held for trading</b>	<p>All derivatives with a positive replacement value, except those that are designated and effective hedging instruments.</p> <p>Any other financial asset acquired principally for the purpose of selling or repurchasing in the near term, or part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. Included in this category are debt instruments (including those in the form of securities, money market paper and traded corporate and bank loans), equity instruments, and assets held under unit-linked investment contracts.</p>	<p>Measured at fair value with changes recognized in profit or loss.</p> <p>Changes in fair value, initial transaction costs and gains and losses realized on disposal or redemption are recognized in <i>Net trading income</i>, except interest and dividend income on instruments other than derivatives (refer to item 3c in this Note), interest on derivatives designated as hedging instruments in certain types of hedge accounting relationships and forward points on certain short duration foreign exchange contracts, which are reported in <i>Net interest income</i>.</p> <p>Derivative assets are generally presented as <i>Positive replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but presented on the same balance sheet line as the host contract measured at amortized cost.</p>
<b>Designated at fair value through profit or loss</b>	<p>A financial asset may be designated at fair value through profit or loss only upon initial recognition and this designation is irrevocable.</p> <p>The fair value option can be applied only if one of the following criteria is met:</p> <ul style="list-style-type: none"> <li>– the financial instrument is a hybrid instrument that includes a substantive embedded derivative;</li> <li>– the financial instrument is part of a portfolio that is risk managed on a fair value basis and reported to senior management on that basis; or</li> <li>– the application of the fair value option eliminates or significantly reduces an accounting mismatch that would otherwise arise.</li> </ul> <p>UBS AG designated at fair value through profit or loss the following financial assets:</p> <ul style="list-style-type: none"> <li>– Certain structured loans, reverse repurchase and securities borrowing agreements that are managed on a fair value basis.</li> <li>– Loans that are hedged predominantly with credit derivatives. These instruments are designated at fair value to eliminate an accounting mismatch.</li> <li>– Certain debt securities held as high-quality liquid assets (HQLA) and managed by Corporate Center – Group ALM on a fair value basis.</li> <li>– Assets held to hedge delivery obligations related to cash-settled employee compensation plans. These assets are designated at fair value in order to eliminate an accounting mismatch that would otherwise arise due to the liability being measured on a fair value basis.</li> </ul>	<p>The presentation of fair value changes on derivatives that are designated and effective hedging instruments differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Financial assets held for trading (other than derivatives) are presented as <i>Trading portfolio assets</i>.</p> <p>Financial assets designated at fair value through profit or loss are presented as <i>Financial assets designated at fair value</i>.</p>
<b>Loans and receivables (amortized cost)</b>	<p>Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not assets for which UBS AG may not recover substantially all of its initial net investment for reasons other than credit deterioration. This classification includes:</p> <ul style="list-style-type: none"> <li>– cash and balances with central banks</li> <li>– cash collateral receivables on derivative instruments</li> <li>– residential and commercial mortgages</li> <li>– secured loans, including reverse repurchase agreements, receivables under stock borrowing and Lombard loans, and unsecured loans</li> <li>– certain securities held within Corporate Center – Non-core and Legacy Portfolio</li> <li>– trade and lease receivables.</li> </ul>	<p>Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).</p> <p>Upfront fees and direct costs relating to loan origination, refinancing or restructuring as well as to loan commitments are deferred and amortized over the life of the loan using the effective interest rate method.</p> <p>Loans and receivables are presented on the balance sheet primarily as <i>Cash and balances with central banks, Due from banks, Loans, Cash collateral on securities borrowed, Reverse repurchase agreements</i> and <i>Cash collateral receivables on derivative instruments</i>.</p> <p>Amounts arising from exchange-traded derivatives (ETD) and certain over-the-counter (OTC) derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to items 3d and 3j in this Note) are presented within <i>Cash collateral receivables on derivative instruments</i>.</p>

## Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
<b>Available for sale</b>	Financial assets classified as available for sale are non-derivative financial assets that are not classified as held for trading, designated at fair value through profit or loss, or loans and receivables. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM, certain asset-backed securities managed by Corporate Center – Group ALM, as well as investment fund holdings and strategic and commercial equity investments.	<p>Measured at fair value with unrealized gains and losses reported in <i>Other comprehensive income</i>, net of applicable income taxes, until such investments are sold, collected or otherwise disposed of, or until any such investment is determined to be impaired (refer to item 3i in this Note). Upon disposal, any accumulated balances in <i>Other comprehensive income</i> are reclassified to the income statement and reported within <i>Other income</i>.</p> <p>Interest and dividend income are recognized in the income statement in accordance with item 3c in this Note. Refer to item 13 in this Note for information on the treatment of foreign exchange translation gains and losses.</p>
<b>Held to maturity</b>	Non-derivative financial assets with fixed or determinable payments and fixed maturities for which UBS AG has the positive intention and ability to hold to maturity. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM.	Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).
Financial liabilities classification	Significant items included	Measurement and presentation
<b>Held for trading</b>	<ul style="list-style-type: none"> <li>– Obligations to deliver financial instruments, such as debt and equity instruments, that UBS AG has sold to third parties, but does not own (short positions).</li> <li>– All derivatives with a negative replacement value, except those that are designated and effective hedging instruments.</li> </ul>	<p>Measurement of trading liabilities follows the same principles as for held for trading assets, and measurement of liabilities designated at fair value through profit or loss follows the same principles as for assets designated at fair value through profit or loss.</p> <p>Presented as <i>Trading portfolio liabilities</i> and <i>Financial liabilities designated at fair value</i>, respectively.</p>
<b>Designated at fair value through profit or loss</b>	<p>UBS AG designated at fair value through profit or loss the following financial liabilities:</p> <ul style="list-style-type: none"> <li>– Issued hybrid debt instruments that primarily include equity-linked, credit-linked and rates-linked bonds or notes.</li> <li>– Issued debt instruments managed on a fair value basis.</li> <li>– Loan commitments that are hedged predominantly with credit derivatives and hence eliminate an accounting mismatch.</li> </ul>	<p>Derivative liabilities are generally presented as <i>Negative replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but are presented on the same balance sheet line as the host contract measured at amortized cost.</p> <p>Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Amounts due under unit-linked investment contracts are presented as <i>Other liabilities</i>.</p>
<b>Amortized cost</b>	<p>This classification includes:</p> <ul style="list-style-type: none"> <li>– Demand and time deposits, retail savings / deposits, cash collateral on securities lent, non-structured fixed-rate bonds, subordinated debt, certificates of deposit, covered bonds.</li> <li>– Cash collateral payables on derivative instruments.</li> </ul>	<p>Measured at amortized cost using the effective interest rate method.</p> <p>Amortized cost liabilities are presented on the balance sheet primarily as <i>Due to banks</i>, <i>Due to customers</i>, <i>Cash collateral on securities lent</i>, <i>Repurchase agreements</i>, <i>Cash collateral payables on derivative instruments</i> and <i>Debt issued</i>.</p> <p>Amounts arising from ETD and certain OTC derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to items 3d and 3j of this Note ) are presented within <i>Cash collateral payables on derivative instruments</i>.</p>

## Note 1 Summary of significant accounting policies (continued)

### c. Interest income and expense

Interest income or expense is determined by reference to a financial instrument's amortized-cost basis calculated using the effective interest rate (EIR) method. UBS AG also uses this method to determine the interest income and expense for financial instruments (excluding derivatives) measured at fair value through profit or loss. Interest income or expense on financial instruments measured at amortized cost, debt instruments measured at fair value through profit or loss and available-for-sale financial assets are presented within *Net interest income*. In addition, *Net interest income* includes the interest income and expense on derivatives designated as hedging instruments in effective hedge relationships and forward points on certain short duration foreign exchange contracts.

Upfront fees, including loan commitment fees where a loan is expected to be issued, and direct costs are included within the initial measurement of a financial instrument measured at amortized cost or classified as available for sale. Such fees and costs are therefore recognized over the expected life of the instrument as part of its EIR.

Fees related to loan commitments where no loan is expected to be issued, as well as loan syndication fees where UBS AG does not retain a portion of the syndicated loan or where UBS AG does retain a portion of the syndicated loan at the same effective yield for comparable risk as other participants, are included in *Net fee and commission income*.

Interest income on financial assets, excluding derivatives, is included in *Interest income* when positive and in *Interest expense* when negative, because negative interest income arising on a financial asset does not meet the definition of revenue. Similarly, interest expense on financial liabilities, excluding derivatives, is included in *Interest expense*, except when interest rates are negative, in which case it is included in *Interest income*. Dividend income on all financial assets is included in *Interest income*.

→ Refer to item 3k in this Note and Note 3 for more information

### d. Derecognition

#### Financial assets

UBS AG derecognizes a financial asset, or a portion of a financial asset, from its balance sheet where the contractual rights to cash flows from the asset have expired, or have been transferred, usually by sale, thus exposing the purchaser to either substantially all the risks and rewards of the asset or a significant part of the risks and rewards combined with a practical ability to sell or pledge the asset.

A financial asset is considered to have been transferred when UBS AG (i) transfers the contractual rights to receive the cash flows of the financial asset or (ii) retains the contractual rights to receive the cash flows of that asset, but assumes a contractual obligation to pay the cash flows to one or more entities.

Where financial assets have been pledged as collateral or in similar arrangements, they are considered to have been transferred if the counterparty has received the contractual right to the cash flows of the pledged assets, as may be evidenced, for example, by the counterparty's right to sell or repledge the assets. Where the counterparty to the pledged financial assets has not received the contractual right to the cash flows, UBS AG does not consider this to be a transfer for the purposes of derecognition.

UBS AG enters into certain transactions where it transfers financial assets recognized on its balance sheet but retains either all or a portion of the risks and rewards of the transferred financial assets. If all or substantially all of the risks and rewards are retained, the transferred financial assets are not derecognized from the balance sheet; for example, securities lending and repurchase transactions or where financial assets are sold to a third party with a total return swap resulting in UBS AG retaining all or substantially all of the risks and rewards of the transferred assets. These types of transactions are accounted for as secured financing transactions as described in item 3e of this Note.

In transactions where substantially all of the risks and rewards of ownership of a financial asset are neither retained nor transferred, UBS AG derecognizes the financial asset if control over the asset is surrendered, and the rights and obligations retained following the transfer are recognized separately as assets and liabilities, respectively. In transfers where control over the financial asset is retained, UBS AG continues to recognize the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset following the transfer.

Certain over-the-counter (OTC) derivative contracts and most exchange-traded futures and options contracts cleared through central clearing counterparties are considered to be settled on a daily basis through the daily margining process, as the payment or receipt of the variation margin represents legal or economic settlement of a derivative contract, which results in derecognition of the associated positive and negative replacement values.

→ Refer to Note 24 for more information



## Note 1 Summary of significant accounting policies (continued)

### *Financial liabilities*

UBS AG derecognizes a financial liability from its balance sheet when it is extinguished, that is, when the obligation specified in the contract is discharged, canceled or has expired. When an existing financial liability is exchanged for a new one from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification results in derecognition of the original liability and the recognition of a new liability with any difference in the respective carrying amounts being recognized in the income statement.

### *e. Securities borrowing / lending and repurchase / reverse repurchase transactions*

Securities borrowing / lending and repurchase / reverse repurchase transactions are generally entered into on a collateralized basis. In such transactions, UBS AG typically borrows or lends equity and debt securities in exchange for securities or cash collateral.

These transactions are treated as collateralized financing transactions where the securities transferred / received are not derecognized or recognized on balance sheet. Securities transferred / received with the right to resell or repledge are disclosed separately.

In reverse repurchase and securities borrowing agreements, the cash delivered is derecognized and a corresponding receivable, including accrued interest, is recorded in the balance sheet lines *Reverse repurchase agreements* and *Cash collateral on securities borrowed*, respectively, representing UBS AG's right to receive the cash. Similarly, in repurchase and securities lending agreements, the cash received is recognized and a corresponding obligation, including accrued interest, is recorded in the balance sheet lines *Repurchase agreements* and *Cash collateral on securities lent*, respectively. Additionally, the sale of securities that is settled by delivering securities received in reverse repurchase or securities borrowing transactions triggers the recognition of a trading liability.

Repurchase and reverse repurchase transactions with the same counterparty, maturity, currency and central securities depository (CSD) are generally presented net, subject to meeting the netting requirements described in item 3j of this Note.

→ Refer to Notes 23 and 24 for more information

### *f. Fair value of financial instruments*

UBS AG accounts for a significant portion of its assets and liabilities at fair value. Fair value is the price on the measurement date that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market, or in the most advantageous market in the absence of a principal market.

All financial instruments measured at fair value are categorized into one of three fair value hierarchy levels. Level 1 financial instruments are those for which fair values can be derived from quoted prices in active markets. Level 2 financial instruments are those for which fair values must be derived using valuation techniques for which all significant inputs are, or are based on, observable market data. Level 3 financial instruments are those for which fair values can only be derived on the basis of valuation techniques for which significant inputs are not based on observable market data.

### *Critical accounting estimates and judgments*

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs require significant judgment and could affect the amount of gain or loss recorded for a particular position. Valuation techniques that rely more heavily on unobservable inputs require a higher level of judgment to calculate a fair value than those entirely based on observable inputs.

Valuation techniques, including models, that are used to determine fair values are periodically reviewed and validated by qualified personnel, independent of those who created them. Models are calibrated to ensure that outputs reflect observable market data, to the extent possible. Also, models prioritize the use of observable inputs, when available, over unobservable inputs. Judgment is required in selecting appropriate models as well as inputs for which observable data is less readily or not available.

UBS AG's valuation techniques may not fully reflect all the factors relevant to the fair value of financial instruments held. Valuations are therefore adjusted, where appropriate, to allow for additional factors, including credit risk, model risk and liquidity risk.

UBS AG's governance framework over fair value measurement is described in Note 22b.

The level of subjectivity and the degree of management judgment involved in the development of estimates and the selection of assumptions are more significant for instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less observable (Level 3 instruments) and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors, which are presented in Note 22d. UBS AG provides a sensitivity analysis of the estimated effects arising from changing significant unobservable inputs in Level 3 financial instruments to reasonably possible alternative assumptions within Note 22g.

→ Refer to Note 22 for more information

## Note 1 Summary of significant accounting policies (continued)

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### g. Allowances and provisions for credit losses

A claim is impaired and an allowance or provision for credit losses is recognized when objective evidence demonstrates that a loss event has occurred after the initial recognition and that the loss event has an impact on the future cash flows that can be reliably estimated (incurred loss approach). UBS AG considers a claim to be impaired if it will be unable to collect all amounts due on it based on the original contractual terms due to credit deterioration of the issuer or counterparty. A claim can be a loan or receivable carried at amortized cost, or a commitment, such as a letter of credit, a guarantee or a similar instrument.

An allowance for credit losses is reported as a decrease in the carrying value of a financial asset. For an off-balance sheet item, such as a commitment, a provision for credit loss is reported in *Provisions*. Changes to allowances and provisions for credit losses are recognized in *Credit loss expense / recovery*.

→ Refer to Notes 10 and 11 for more information

### Critical accounting estimates and judgments

Allowances and provisions for credit losses are evaluated at both a counterparty-specific level and collectively. Judgment is used in making assumptions about the timing and amount of impairment losses.

#### Counterparty-specific allowances and provisions

Loans are evaluated individually for impairment if objective evidence indicates that a loan may be impaired. Individual credit exposures are evaluated on the basis of the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The impairment loss for a loan is the excess of the carrying value of the financial asset over the estimated recoverable amount. The estimated recoverable amount is the present value, calculated using the loan's original effective interest rate, of expected future cash flows, including amounts that may result from restructuring or the liquidation of collateral. If a loan has a variable interest rate, the discount rate for calculating the recoverable amount is the current effective interest rate. Upon impairment, interest income is accrued by

applying the original effective interest rate to the impaired carrying value of the loan.

All impaired loans are reviewed and analyzed at least annually. Any subsequent changes to the amounts and timing of the expected future cash flows compared with prior estimates result in a change in the allowance for credit losses and are charged or credited to *Credit loss expense / recovery*. An allowance for impairment is reversed only when the credit quality has improved to such an extent that there is reasonable assurance of timely collection of principal and interest in accordance with the original contractual terms of the instrument, or the equivalent value thereof. A write-off is made when all or part of a financial asset is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are credited to *Credit loss expense / recovery*.

#### Collective allowances and provisions

Collective allowances and provisions are calculated for portfolios with similar credit risk characteristics, taking into account historical loss experience and current conditions. The methodology and assumptions used are reviewed regularly to reduce any differences between estimated and actual loss experience. For all of its portfolios, UBS AG also assesses whether there have been any unforeseen developments that might result in impairments that are not immediately observable at a counterparty level. To determine whether an event-driven collective allowance for credit losses is required, UBS AG considers global economic drivers to assess the most vulnerable countries and industries. As the allowance cannot be allocated to individual loans, the loans are not considered to be impaired and interest is accrued on each loan according to its contractual terms. If objective evidence becomes available that indicates that an individual financial asset is impaired, it is removed from the group of financial assets assessed for impairment on a collective basis and is assessed separately as counterparty-specific.

## Note 1 Summary of significant accounting policies (continued)

### h. Restructured loans

A renegotiated or restructured loan is a loan for which the terms have been modified or for which additional collateral has been requested that was not contemplated in the original contract.

Typical key features of terms and conditions granted through restructuring to avoid default include special interest rates, postponement of interest or principal payments, debt / equity swaps, modification of the schedule of repayments, subordination or amendment of loan maturity. There is no change in the EIR following a renegotiation.

If a loan is restructured with preferential conditions (i.e., new or modified terms and conditions are agreed upon that do not meet the normal market criteria for the quality of the obligor and the type of loan), it is classified as defaulted. It will remain so until the loan is collected, written off or non-preferential conditions are granted that supersede the preferential conditions.

Concessions granted where there is no evidence of financial difficulty, or where any changes to terms and conditions are within UBS AG's usual risk appetite, are not deemed restructured.

A restructuring of a loan could lead to a fundamental change in the terms, resulting in the original loan being derecognized and a new loan being recognized.

If a loan is derecognized in these circumstances, the new loan is measured at fair value at initial recognition. Any allowance taken to date against the original loan is derecognized and is not attributed to the new loan. Consequently, the new loan is assessed for impairment on an individual basis. If the loan is not impaired, the loan is included within the general collective loan assessment for the purpose of measuring credit losses.

### i. Impairment of financial assets classified as available for sale

At each balance sheet date, UBS AG assesses whether indicators of impairment are present. Available-for-sale debt instruments are impaired when there is objective evidence, using the same criteria described in item 3g, that, as a result of one or more events that occurred after the initial recognition of the asset, the estimated future cash flows have decreased.

Objective evidence that there has been an impairment of an available-for-sale equity instrument is a significant or prolonged decline in the fair value of the asset. UBS AG uses a rebuttable presumption that such instruments are impaired where there has been a decline in fair value of more than 20% below its original cost or fair value has been below original cost for more than six months.

To the extent a financial asset classified as available for sale is determined to be impaired, the related cumulative net unrealized loss previously recognized in *Other comprehensive income* is reclassified to the income statement within *Other income*. For equity instruments, any further loss is recognized directly in the income statement, whereas for debt instruments,

any further loss is recognized in the income statement only if there is additional objective evidence of impairment. After the recognition of an impairment on a financial asset classified as available for sale, increases in the fair value of equity instruments are reported in *Other comprehensive income*. For debt instruments, such increases in the fair value, up to amortized cost in the transaction currency, are recognized in *Other income*, provided that the fair value increase is related to an event occurring after the impairment loss was recorded. Increases in excess of that amount are reported in *Other comprehensive income*.

### j. Netting

UBS AG nets financial assets and liabilities on its balance sheet if (i) it has the unconditional and legally enforceable right to set off the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG and its counterparties, and (ii) intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Netted positions include, for example, certain derivatives and repurchase and reverse repurchase transactions with various counterparties, exchanges and clearing houses.

In assessing whether UBS AG intends to either settle on a net basis, or to realize the asset and settle the liability simultaneously, emphasis is placed on the effectiveness of operational settlement mechanics in eliminating substantially all credit and liquidity exposure between the counterparties. This condition precludes offsetting on the balance sheet for substantial amounts of UBS AG's financial assets and liabilities, even though they may be subject to enforceable netting arrangements. For OTC derivative contracts, balance sheet offsetting is generally only permitted in circumstances in which a market settlement mechanism exists via an exchange or central clearing counterparty that effectively accomplishes net settlement through a daily exchange of collateral via a cash margining process. For repurchase arrangements and securities financing transactions, balance sheet offsetting may be permitted only to the extent that the settlement mechanism eliminates, or results in insignificant, credit and liquidity risk, and processes the receivables and payables in a single settlement process or cycle.

→ Refer to Note 24 for more information

### k. Hedge accounting

UBS AG uses derivative and non-derivative instruments to manage exposures to interest rate and foreign currency risks, including exposures arising from forecast transactions. Qualifying instruments may be designated as hedging instruments in (i) hedges of the change in fair value of recognized assets or liabilities (fair value hedges), (ii) hedges of the variability in future cash flows attributable to a recognized asset or liability or highly probable forecast transactions (cash flow hedges) or (iii) hedges of a net investment in a foreign operation (net investment hedges).

## Note 1 Summary of significant accounting policies (continued)

At the time a financial instrument is designated in a hedge relationship, UBS AG formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction and the methods that will be used to assess the effectiveness of the hedging relationship. Accordingly, UBS AG assesses, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments, primarily derivatives, have been "highly effective" in offsetting changes in the fair value or cash flows associated with the designated risk of the hedged items. A hedge is considered highly effective if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk and (ii) actual results of the hedge are within a range of 80–125%. In the case of hedging forecast transactions, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. UBS AG discontinues hedge accounting when (i) it determines that a hedging instrument is not, or has ceased to be, highly effective as a hedge, (ii) the derivative expires or is sold, terminated or exercised, (iii) the hedged item matures, is sold or repaid or (iv) forecast transactions are no longer deemed highly probable. UBS AG may also discontinue hedge accounting voluntarily.

Hedge ineffectiveness represents the amount by which the changes in the fair value of the hedging instrument differ from changes in the fair value of the hedged item attributable to the hedged risk, or the amount by which changes in the present value of future cash flows of the hedging instrument exceed changes in the present value of expected cash flows of the hedged item. Such ineffectiveness is recorded in current period earnings in *Net trading income*.

Interest from derivatives designated as hedging instruments in effective fair value hedge relationships is presented within *Interest income from loans and deposits* and *Interest expense on debt issued*, within *Net interest income*. Interest from derivatives designated as hedging instruments in effective cash flow hedge relationships that is reclassified from other comprehensive income when the hedged transaction affects profit or loss is presented within *Interest income from derivative instruments designated as cash flow hedges*.

→ Refer to Note 3 for more information

### Fair value hedges

For qualifying fair value hedges, the change in the fair value of the hedging instrument is recognized in the income statement along with the change in the fair value of the hedged item that is attributable to the hedged risk. In fair value hedges of interest rate risk, the fair value change of the hedged item attributable to the hedged risk is reflected as an adjustment to the carrying value of

the hedged item. If the hedge accounting relationship is terminated for reasons other than the derecognition of the hedged item, the adjustment to the carrying value is amortized to the income statement over the remaining term to maturity of the hedged item using the effective interest rate method. For a portfolio hedge of interest rate risk, the equivalent change in fair value is reflected within *Other assets* or *Other liabilities*. If the portfolio hedge relationship is terminated for reasons other than the derecognition of the hedged item, the amount included in *Other assets* or *Other liabilities* is amortized to the income statement over the remaining term to maturity of the hedged items using the straight-line method.

### Cash flow hedges

Fair value gains or losses associated with the effective portion of derivatives designated as cash flow hedges for cash flow repricing risk are recognized initially in *Other comprehensive income* within *Equity*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to the income statement.

If a cash flow hedge of forecast transactions is no longer considered effective, or if the hedge relationship is terminated, the cumulative gains or losses on the hedging derivatives previously reported in *Equity* remain there until the committed or forecast transactions occur and affect profit or loss. If the forecast transactions are no longer expected to occur, the deferred gains or losses are reclassified immediately to the income statement.

### Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized directly in *Equity* (and presented in the statement of changes in equity and statement of comprehensive income under *Foreign currency translation*), while any gains or losses relating to the ineffective and / or undesignated portion (for example, the interest element of a forward contract) are recognized in the income statement. Upon disposal or partial disposal of the foreign operation, the cumulative value of any such gains or losses recognized in *Equity* associated with the entity is reclassified to the income statement.

### Economic hedges that do not qualify for hedge accounting

Derivative instruments that are transacted as economic hedges, but do not qualify for hedge accounting, are treated in the same way as derivative instruments used for trading purposes (i.e., realized and unrealized gains and losses are recognized in *Net trading income*), except for the forward points on certain short duration foreign exchange contracts, which are reported in *Net interest income*.

→ Refer to Note 12 for more information

## Note 1 Summary of significant accounting policies (continued)

### I. Embedded derivatives

Derivatives may be embedded in other financial instruments (host contracts). For example, they could be represented by the conversion feature embedded in a convertible bond. Such hybrid instruments arise predominantly from the issuance of certain structured debt instruments. An embedded derivative is generally required to be separated from the host contract and accounted for as a standalone derivative instrument at fair value through profit or loss if (i) the host contract is not carried at fair value with changes in fair value reported in the income statement, (ii) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract and (iii) the terms of the embedded derivative would meet the definition of a standalone derivative, were they contained in a separate contract.

Typically, UBS AG applies the fair value option to hybrid instruments (refer to item 3b in this Note for more information), in which case bifurcation of an embedded derivative component is not required.

### m. Financial liabilities

#### Debt issued

Debt issued is carried at amortized cost, including contingent capital instruments that contain contractual provisions under which the principal amounts would be written down upon either a specified CET1 ratio breach or a determination by FINMA that a viability event has occurred. Such contractual provisions are not derivatives as the underlying is deemed to be a non-financial variable specific to a party to the contract. Where there is a legal bail-in mechanism for write-down or conversion into equity (as is the case, for instance, with senior unsecured debt issued by UBS AG that is subject to write-down or conversion under resolution authority granted to FINMA under Swiss law), such mechanism does not form part of the contractual terms and, therefore, also does not affect the amortized cost accounting treatment applied to these instruments. If the debt were to be written down or converted into equity in a future period, this would result in the full or partial derecognition of the financial liabilities, with the difference between the carrying value of the debt written down or converted into equity and the fair value of any equity shares issued recognized in the income statement.

In cases where, as part of UBS AG's risk management activity, fair value hedge accounting is applied to fixed-rate debt instruments carried at amortized cost, their carrying amount is adjusted for changes in fair value related to the hedged exposure. Refer to item 3k for more information on hedge accounting.

Obligations of UBS AG arising from funding it has received from UBS Group AG or its subsidiaries, which are not within the UBS AG scope of consolidation, are presented as *Due to customers*.

Debt issued and subsequently repurchased in relation to market-making or other activities is treated as redeemed. A gain or loss on redemption (depending on whether the repurchase price of the bond is lower or higher than its carrying value) is recorded in *Other income*. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

#### Financial liabilities designated at fair value

UBS AG uses the fair value option to designate certain issued debt instruments as financial liabilities designated at fair value through profit or loss, on the basis that such financial instruments include embedded derivatives and / or are managed on a fair value basis (refer to item 3b in this Note for more information).

#### n. Own credit

From 1 January 2016 onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings* and will not be reclassified to the income statement in future periods.

#### o. Loan commitments

Loan commitments are arrangements under which clients can borrow stipulated amounts under defined terms and conditions.

Loan commitments that can be canceled at any time by UBS AG at its discretion are neither recognized on the balance sheet nor included in off-balance sheet disclosures.

Loan commitments that cannot be canceled by UBS AG once the commitments are communicated to the beneficiary or which are revocable only due to automatic cancellation upon deterioration in a borrower's creditworthiness are considered irrevocable and are classified as (i) *derivative loan commitments* measured at fair value through profit or loss, (ii) *loan commitments designated at fair value through profit or loss* or (iii) *other loan commitments*. Other loan commitments are not recorded on the balance sheet, but a provision is recognized through profit or loss if it is probable that a loss has been incurred and a reliable estimate of the amount of the obligation can be made. Any change in the liability relating to these other loan commitments is recorded in the income statement in *Credit loss expense / recovery*.

When a client draws on a commitment, the resulting loan is classified as a (i) *trading asset*, consistent with the associated *derivative loan commitment*, (ii) *financial asset designated at fair value through profit or loss*, consistent with the *loan commitment designated at fair value through profit or loss* or as a (iii) *loan*, when the associated loan commitment is accounted for as *other loan commitment*.

## Note 1 Summary of significant accounting policies (continued)

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### p. Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for an incurred loss because a specified debtor fails to make payments when due in accordance with the terms of a specified debt instrument. UBS AG issues such financial guarantees to banks, financial institutions and other parties on behalf of clients to secure loans, overdrafts and other banking facilities.

Certain issued financial guarantees that are managed on a fair value basis are designated at fair value through profit or loss.

Financial guarantees that are not managed on a fair value basis are initially recognized in the financial statements at fair value and are subsequently measured at the higher of the amount initially recognized less cumulative amortization and, to the extent a payment under the guarantee has become probable, the present value of the expected payment. Any change in the liability relating to probable expected payments resulting from guarantees is recorded in the income statement in *Credit loss expense / recovery*.

### 4) Fee income

UBS AG earns fee income from a diverse range of services it provides to its clients. Fee income can be divided into two broad categories: (i) fees earned from services that are provided over a certain period of time, such as portfolio management and advisory fees, and (ii) fees earned from providing transaction-type services, such as underwriting fees, corporate finance fees and brokerage fees.

Fees earned from services that are provided over a certain period of time are recognized ratably over the service period, with the exception of performance-linked fees or fee components with specific performance criteria. Such fees are recognized when, as of the reporting date, the performance benchmark has been met and when collectibility is reasonably assured.

Fees earned from providing transaction-type services are recognized when the service has been completed and the fee is fixed or determinable, i.e., not subject to refund or adjustment.

Fee income generated from providing a service that does not result in the recognition of a financial instrument is presented within *Net fee and commission income*. Fees generated from the acquisition, issue or disposal of a financial instrument are presented in the income statement in line with the balance sheet classification of that financial instrument.

→ Refer to Note 4 for more information

### 5) Cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents comprise balances with an original maturity of three months or less, including cash, money market paper and balances with central and other banks.

### 6) Share-based and other deferred compensation plans

UBS Group AG is the grantor of and maintains the obligation to settle share-based compensation plans that are awarded to employees of UBS AG. UBS AG recognizes the fair value of awards granted to its employees. These awards are generally subject to conditions that require employees to complete a specified period of service and, for performance shares, to satisfy specified performance conditions. Compensation expense is recognized, on a per tranche basis, over the service period based on an estimate of the number of instruments expected to vest and is adjusted to reflect actual outcomes. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date.

Where no future service is required, such as for employees who are retirement eligible or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. Such awards may remain forfeitable until the legal vesting date if certain non-vesting conditions are not met. For equity-settled awards, forfeiture events resulting from breach of a non-vesting condition do not result in an adjustment to expense.

UBS AG has no obligation to settle the awards and therefore awards over UBS Group AG shares are classified as equity-settled share-based payment transactions. Compensation expense is measured by reference to the fair value of UBS Group AG equity instruments on the date of grant adjusted, when relevant, to take into account the terms and conditions inherent in the award, including dividend rights, transfer restrictions in effect beyond the vesting date, and non-vesting conditions. Fair value is determined at the date of grant and is not remeasured unless its terms are modified such that the fair value immediately after modification exceeds the fair value immediately prior to modification. Any increase in fair value resulting from a modification is recognized as compensation expense, either over the remaining service period or, for vested awards, immediately.

→ Refer to Note 27 for more information

## Note 1 Summary of significant accounting policies (continued)

### *Other compensation plans*

The employees of UBS AG are granted deferred compensation plans that are settled in cash or financial instruments other than UBS AG equity, the amount of which may be fixed or may vary based on the achievement of specified performance conditions or the value of specified underlying assets. Compensation expense is recognized over the period that the employee provides services to become entitled to the award. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date. Where no future service is required, such as for employees who are retirement eligible or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. The amount recognized is based on the present value of the amount expected to be paid under the plan and is remeasured at each reporting date, so that the cumulative expense recognized equals the cash or the fair value of respective financial instruments distributed.

→ Refer to Note 27 for more information

### *7) Pension and other post-employment benefit plans*

UBS AG sponsors various post-employment benefit plans for its employees worldwide, which include defined benefit and defined contribution pension plans, and other post-employment benefits such as medical and life insurance benefits that are payable after the completion of employment.

→ Refer to Note 26 for more information

### *Defined benefit pension plans*

Defined benefit pension plans specify an amount of benefit that an employee will receive, which usually depends on one or more factors, such as age, years of service and compensation. The defined benefit liability recognized in the balance sheet is the present value of the defined benefit obligation less the fair value of the plan assets at the balance sheet date with changes resulting from remeasurements recorded immediately in *Other*

*comprehensive income*. If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. UBS AG applies the projected unit credit method to determine the present value of its defined benefit obligations, the related current service cost and, where applicable, past service cost. The projected unit credit method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. These amounts, which take into account the specific features of each plan, including risk sharing between employee and employer, are calculated periodically by independent qualified actuaries.

### *Critical accounting estimates and judgments*

The net defined benefit liability or asset at the balance sheet date and the related personnel expense depend on the expected future benefits to be provided, determined using a number of economic and demographic assumptions. A range of assumptions could be applied, and different assumptions could significantly alter the defined benefit liability or asset and pension expense recognized. The most significant assumptions include life expectancy, the discount rate, expected salary increases, pension increases and, in addition for the Swiss plan and one of the US defined benefit pension plans, interest credits on retirement savings account balances. Life expectancy is determined by reference to published mortality tables. The discount rate is determined by reference to the rates of return on high-quality fixed-income investments of appropriate currency and term at the measurement date. The assumption for salary increases reflects the long-term expectations for salary growth and takes into account historical salary development by age groups, expected inflation and expected supply and demand in the labor market. A sensitivity analysis for reasonable possible movements in each significant assumption for UBS AG's post-employment obligations is provided within Note 26.

## Note 1 Summary of significant accounting policies (continued)

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### *Defined contribution plans*

A defined contribution plan is a pension plan under which UBS AG pays fixed contributions into a separate entity from which post-employment and other benefits are paid. UBS AG has no legal or constructive obligation to pay further contributions if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. UBS AG's contributions are expensed when the employees have rendered services in exchange for such contributions. This is generally in the year of contribution. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

### *Other post-employment benefits*

UBS AG also provides post-employment medical insurance benefits to certain retirees in the US and the UK. The expected costs of these benefits are recognized over the period of employment using the same accounting methodology used for defined benefit pension plans.

### **8) Income taxes**

UBS AG is subject to the income tax laws of Switzerland and those of the non-Swiss jurisdictions in which UBS AG has business operations.

UBS AG's provision for income taxes is composed of current and deferred taxes. Current income taxes represent taxes to be paid or refunded for the current period or previous periods.

Deferred taxes are recognized for temporary differences between the carrying amounts and tax bases of assets and liabilities that will result in taxable or deductible amounts in future periods and are measured using the applicable tax rates and laws that have been enacted or substantively enacted by the end of the reporting period and which will be in effect when such differences are expected to reverse.

Deferred tax assets arise from a variety of sources, the most significant being: (i) tax losses that can be carried forward to be used against profits in future years and (ii) expenses recognized in UBS AG's income statement that are not deductible until the associated cash flows occur. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable

profits will be available against which these differences can be used. When an entity or tax group has a history of recent losses, deferred tax assets are only recognized to the extent there are sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized.

Deferred tax liabilities are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet that reflect the expectation that certain items will give rise to taxable income in future periods.

Deferred and current tax assets and liabilities are offset when (i) they arise in the same tax reporting group, (ii) they relate to the same tax authority, (iii) the legal right to offset exists and (iv) they are intended to be settled net or realized simultaneously.

Current and deferred taxes are recognized as income tax benefit or expense in the income statement except for current and deferred taxes recognized (i) upon the acquisition of a subsidiary, (ii) for unrealized gains or losses on financial instruments that are classified as available for sale, (iii) for changes in fair value of derivative instruments designated as cash flow hedges, (iv) for remeasurements of defined benefit plans, (v) for certain foreign currency translations of foreign operations and (vi) for gains and losses on the sale of treasury shares. Amounts relating to points (ii), (iii), (iv) and (v) are recognized in *Other comprehensive income* within *Equity*.

### *Critical accounting estimates and judgments*

Tax laws are complex and judgment and interpretations about the application of such laws are required when accounting for income taxes. UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.



## Note 1 Summary of significant accounting policies (continued)

The level of deferred tax asset recognition is influenced by management's assessment of UBS AG's future profitability based on relevant business plan forecasts. Existing assessments are reviewed and, if necessary, revised to reflect changed circumstances. This review is conducted annually, in the second half of each year, but adjustments may be made at other times, if required. In a situation where recent losses have been incurred, convincing evidence that there will be sufficient future profitability is required.

If profit forecast assumptions in future periods deviate from the current outlook, the value of UBS AG's deferred tax assets may be affected. Any increase or decrease in the carrying amount of deferred tax assets would primarily be recognized through the income statement but would not affect cash flows.

Judgment is also required to forecast the expected outcome of uncertain tax positions that may require the interpretation of tax laws and the resolution of any income tax-related appeals or litigation that are incorporated into the estimate of income and deferred tax.

→ Refer to Note 8 for more information

### 9) Investment in associates

Entities where UBS AG has significant influence over the financial and operating policies of the entity, but does not have control, are classified as investments in associates and accounted for under the equity method of accounting. Typically, UBS AG has significant influence when it holds or has the ability to hold between 20% and 50% of a company's voting rights. Investments in associates are initially recognized at cost, and the carrying amount is increased or decreased after the date of acquisition to recognize UBS AG's share of the investee's comprehensive income and any impairment losses.

The net investment in an associate is impaired if there is objective evidence of a loss event and the carrying value of the investment in the associate is below its recoverable amount.

→ Refer to Note 28 for more information

### 10) Property, equipment and software

Property, equipment and software includes own-used properties, leasehold improvements, information technology hardware, externally purchased and internally generated software, as well as communication and other similar equipment. Property, equipment and software is carried at cost less accumulated depreciation and impairment losses and is reviewed at each reporting date for indication for impairment. Software development costs are capitalized only when the costs can be measured reliably and it is probable that future economic benefits will arise. Depreciation of property, equipment and software begins when they are available for use, that is, when they are in the location and condition necessary for them to be capable of operating in the manner intended by management. Depreciation is calculated on a straight-line basis over an asset's estimated useful life. The estimated useful economic lives of UBS AG's property, equipment and software are:

- properties, excluding land: ≤ 67 years
- IT hardware and communication equipment: ≤ 7 years
- other machines and equipment: ≤ 10 years
- software: ≤ 10 years
- leasehold improvements: shorter of the lease term or the economic life of asset (typically ≤ 20 years)

→ Refer to Note 14 for more information

### 11) Goodwill and intangible assets

Goodwill represents the excess of the cost of an acquisition over the fair value of UBS AG's share of net identifiable assets of the acquired entity at the date of the acquisition. Goodwill is not amortized, but at the end of each reporting period or when indicators of impairment exist, UBS AG assesses whether there is any indication that goodwill is impaired. If such indicators exist, UBS AG is required to test the goodwill for impairment. Irrespective of whether there is any indication of impairment, UBS AG tests goodwill for impairment annually. UBS AG considers the segments, as reported in Note 2a, as separate cash-generating units, since this is the level at which the performance of investments is reviewed and assessed by management. The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, to the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount.

## Note 1 Summary of significant accounting policies (continued)

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If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of UBS AG's goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce net profit and equity, but would not affect cash flows.

Intangible assets are comprised of separately identifiable intangible items arising from business combinations and certain purchased trademarks and similar items. Intangible assets are recognized at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Intangible assets with a finite useful life are amortized using the straight-line method over their estimated useful life, generally not exceeding 20 years. In rare cases, intangible assets can have an indefinite useful life, in which case they are not amortized. At each reporting date, intangible assets are reviewed for indications of impairment. If such indications exist, the intangible assets are analyzed to assess whether their carrying amount is fully recoverable. An impairment loss is recognized if the carrying amount exceeds the recoverable amount.

### *Critical accounting estimates and judgments*

UBS AG's methodology for goodwill impairment testing is based on a model that is most sensitive to the following key assumptions: (i) forecasts of earnings available to shareholders in years one to three, (ii) changes in the discount rates and (iii) changes in the long-term growth rate. Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Refer to Note 15 for the discussion of how the reasonably possible changes in those key assumptions may affect the results delivered by UBS AG's model for goodwill impairment testing.

→ Refer to Notes 2 and 15 for more information

### **12) Provisions and contingent liabilities**

Provisions are liabilities of uncertain timing or amount, and are recognized when (i) UBS AG has a present obligation as a result of a past event, (ii) it is probable that an outflow of resources will be required to settle the obligation and (iii) a reliable estimate of the amount of the obligation can be made.

The majority of UBS AG's provisions relate to litigation, regulatory and similar matters, restructuring, employee benefits, real estate and loan commitments and guarantees.

UBS AG recognizes provisions for litigation, regulatory and similar matters when, in the opinion of management after

seeking legal advice, it is more likely than not that UBS AG has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS AG, but are nevertheless expected to be, based on UBS AG's experience with similar asserted claims.

Restructuring provisions are recognized when a detailed and formal restructuring plan has been approved and a valid expectation has been raised that the restructuring will be carried out, either through commencement of the plan or announcements to affected employees.

Provisions are recognized for lease contracts if the unavoidable costs of a contract exceed the benefits expected to be received under it (onerous lease contracts). For example, this may occur when a significant portion of a leased property is expected to be vacant for an extended period.

Provisions for employee benefits are recognized mainly in respect of service anniversaries and sabbatical leave.

Provisions are recognized at the best estimate of the consideration required to settle the present obligation at the balance sheet date. Such estimates are based on all available information and are revised over time as more information becomes available. If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to settle or discharge the obligation, using a rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

Provisions that are similar in nature are aggregated to form a class, while the remaining provisions, including those of less significant amounts, are presented under *Other provisions*. Provisions are presented separately on the balance sheet and, when they are no longer considered uncertain in timing or amount, are reclassified to *Other liabilities – Other*.

When all conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote, in which case no provision is recognized and no contingent liability is reported. Contingent liabilities are also disclosed for possible obligations that arise from past events whose existence will be confirmed only by uncertain future events not wholly within the control of UBS AG. Such disclosures are not made if it is not practicable to do so.

## Note 1 Summary of significant accounting policies (continued)

### *Critical accounting estimates and judgments*

Recognition of provisions often involves significant judgment in assessing the existence of an obligation that results from past events and in estimating the probability, timing and amount of any outflows of resources. This is particularly the case for litigation, regulatory and similar matters, which, due to their nature, are subject to many uncertainties making their outcome difficult to predict. Such matters may involve unique fact patterns or novel legal theories, proceedings that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Determining whether an obligation exists as a result of a past event and estimating the probability, timing and amount of any potential outflows is based on a variety of assumptions, variables, and known and unknown uncertainties.

The amount of any provision recognized is sensitive to the assumptions used and there could be a wide range of possible outcomes for any particular matter.

Statistical or other quantitative analytical tools are of limited use in determining whether to establish or determine the amount of provisions in the case of litigation, regulatory or similar matters. Furthermore, information currently available to management may be incomplete or inaccurate, increasing the risk of erroneous assumptions with regard to the future development of such matters. Management regularly reviews all the available information regarding such matters, including legal advice, which is a significant consideration, to assess whether the recognition criteria for provisions have been satisfied and to determine the timing and amount of any potential outflows.

→ Refer to Note 20 for more information

### 13) Foreign currency translation

Transactions denominated in a foreign currency are translated into the functional currency of the reporting entity at the spot exchange rate on the date of the transaction. At the balance sheet date, all monetary assets and liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction. Foreign currency translation differences on non-

monetary financial assets classified as available for sale are generally recorded directly in *Equity* until the asset is sold or becomes impaired. However, translation differences on available-for-sale monetary financial assets are reported in *Net trading income* on an amortized-cost basis, along with all other foreign currency translation differences on monetary assets and liabilities.

Upon consolidation, assets and liabilities of foreign operations are translated into Swiss francs (CHF), UBS AG's presentation currency, at the closing exchange rate on the balance sheet date, and income and expense items are translated at the average rate for the period. The resulting foreign currency translation differences attributable to shareholders are recognized directly in *Foreign currency translation* within *Equity*, which forms part of *Total equity attributable to shareholders*, whereas the foreign currency translation differences attributable to non-controlling interests are shown within *Equity attributable to non-controlling interests*.

When a foreign operation is disposed or partially disposed of and UBS AG loses control over the foreign operation, the cumulative amount of foreign currency translation differences within *Total equity attributable to shareholders* and *Equity attributable to non-controlling interests* related to that foreign operation is reclassified to the income statement as part of the gain or loss on disposal. When UBS AG disposes of a portion of its interest in a subsidiary that includes a foreign operation but retains control, the related portion of the cumulative currency translation balance is reclassified to *Equity attributable to non-controlling interests*.

→ Refer to Note 34 for more information

### 14) Non-controlling interests and preferred noteholders

*Net profit* is split into *Net profit attributable to shareholders*, *Net profit attributable to non-controlling interests* and *Net profit attributable to preferred noteholders*. Similarly, *Equity* is split into *Equity attributable to shareholders*, *Equity attributable to non-controlling interests* and *Equity attributable to preferred noteholders*.

## Note 1 Summary of significant accounting policies (continued)

### 15) Leasing

UBS AG enters into lease contracts, or contracts that include lease components, predominantly of premises and equipment, and primarily as lessee. Leases that transfer substantially all the risks and rewards, but not necessarily legal title in the underlying assets, are classified as finance leases. All other leases are classified as operating leases. UBS AG is not a lessee in any material finance leases.

Lease contracts classified as operating leases where UBS AG is the lessee include non-cancelable long-term leases of office buildings in most UBS AG locations. Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences with control of the physical use of the property. Lease incentives are treated as a reduction of rental expense and are recognized on a consistent basis over the lease term.

Where UBS AG acts as lessor under a finance lease, a receivable is recognized in *Loans* at an amount equal to the present value of the aggregate of the minimum lease payments

plus any unguaranteed residual value that UBS AG expects to recover at the end of the lease term. Initial direct costs are also included in the initial measurement of the lease receivable. Lease payments received during the lease term are allocated to repayment of the outstanding receivable and interest income to reflect a constant periodic rate of return on UBS AG's net investment using the interest rate implicit in the lease. UBS AG reviews the estimated unguaranteed residual value annually, and if the estimated residual value to be realized is less than the amount assumed at lease inception, a loss is recognized for the expected shortfall.

Certain arrangements do not take the legal form of a lease but convey a right to use an asset in return for a payment or series of payments. For such arrangements, UBS AG determines at the inception of the arrangement whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets, and if so, the arrangement is accounted for as a lease.

→ Refer to Notes 10 and 31 for more information

## b) Changes in accounting policies, comparability and other adjustments

### *Presentation of interest income and expense on derivatives designated as hedging instruments*

Effective 1 January 2017, UBS AG refined the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships to align the presentation with interest arising from designated hedged items. As a result of this presentation change:

- *Interest income from loans and deposits* was CHF 530 million lower, while *Interest expense on debt issued* and *Interest expense on loans and deposits* for the year ended 31 December 2017 were lower by CHF 382 million and CHF 148 million, respectively, with no change to *Net interest income*.
- Interest income from derivative instruments designated as cash flow hedges, previously included within *Interest income from loans and deposits*, is now separately disclosed within Note 3.

Prior-period information has not been restated, as the effect was not material.

→ Refer to Note 3 for more information

### *Amendments to IAS 7, Statement of Cash Flows*

UBS AG adopted amendments to IAS 7, *Statement of Cash Flows*, in 2017 and now separately discloses the drivers of changes in financial liabilities arising from financing activities, including changes arising from cash flows and non-cash changes, in its statement of cash flows.

→ Refer to the statement of cash flows for more information

→ Refer to the "Balance sheet, liquidity and funding management" section of this report for information on liabilities and funding management

### *Amendments to IAS 12, Income Taxes*

In 2017, UBS AG adopted amendments to IAS 12, *Income Taxes*, that clarify how to account for deferred tax assets related to debt instruments measured at fair value. The adoption of these amendments did not have a material impact on UBS AG's financial statements.

## Note 1 Summary of significant accounting policies (continued)

### c) International Financial Reporting Standards and Interpretations to be adopted in 2018 and later and other changes

#### Effective from 2018

##### *Changes in segment reporting*

Effective 1 February 2018, UBS AG integrated its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division, which is managed on an integrated basis, with a single set of key performance indicators, performance targets, operating plan and management structure. Consistent with this, the operating results of Global Wealth Management will be presented and assessed on an integrated basis in internal reporting to management. Consequently, beginning from the first quarter of 2018, Global Wealth Management qualifies as an operating and reportable segment for the purposes of segment reporting and will be presented alongside Personal & Corporate Banking, Asset Management, the Investment Bank, and Corporate Center (with its units Services, Group Asset and Liability Management (Group ALM) and Non-core and Legacy Portfolio).

##### *IFRS 9, Financial Instruments*

IFRS 9, *Financial Instruments* is effective from 1 January 2018 and will be applicable from UBS AG's first quarter 2018 reporting. IFRS 9 reflects the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39, *Financial Instruments: Recognition and Measurement*. In addition, UBS AG will early adopt the Amendment to IFRS 9, *Prepayment Features with Negative Compensation*, issued in October 2017, which allows it to continue to apply amortized cost accounting to Swiss private mortgages and corporate loans that provide for two-way compensation if a prepayment occurs.

##### *Classification and measurement*

IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, at fair value through other comprehensive income (OCI) or at fair value through profit or loss, based on the business model for managing the respective financial assets and their contractual cash flow characteristics. If a financial asset meets the criteria to be measured at amortized cost or at fair value through OCI, it can be designated at fair value through profit or loss if doing so would significantly reduce or eliminate an accounting mismatch. Equity instruments that are not held for trading may be accounted for at fair value through OCI, with no subsequent reclassification of realized gains or losses to the income statement under any circumstances, while all other equity instruments will be accounted for at fair value through profit or loss.

For UBS AG, the most significant IFRS 9 classification and measurement changes on transition are due to the following:

- financial assets that will no longer qualify for amortized cost accounting under IFRS 9 will be classified at fair value through profit or loss because their cash flow characteristics do not satisfy the solely payments of principal and interest criteria (e.g., auction rate securities and certain brokerage receivables);
- lending arrangements that no longer qualify for amortized cost accounting under IFRS 9 will be classified at fair value through profit or loss because the business model within which they are managed does not have an objective to hold financial assets in order to collect the contractual cash flows (e.g., certain Investment Bank lending arrangements);
- equity instruments classified as available for sale under IAS 39 will be classified at fair value through profit or loss under IFRS 9; and
- financial liabilities will be newly designated under IFRS 9 at fair value through profit or loss, from amortized cost accounting, to align with conclusions reached for associated financial assets that will be measured at fair value through profit or loss (e.g., brokerage payables).

IFRS 9 classification and measurement requirements for financial liabilities are unchanged from IAS 39, except that any gain or loss arising on a financial liability designated at fair value through profit or loss that is attributable to changes in the issuer's own credit risk (own credit) is presented in OCI and not recognized in the income statement. UBS AG early adopted the own credit presentation change from 1 January 2016.

##### *Expected credit losses*

IFRS 9 introduces an approach for determining impairment based on forward-looking expected credit losses (ECLs), which is intended to result in an earlier recognition of credit losses compared with the existing incurred-loss impairment approach for financial instruments in IAS 39, and the loss-provisioning approach for financial guarantees and loan commitments in IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. The new impairment model applies to financial assets measured at amortized cost, debt instruments measured at fair value through OCI, lease receivables, and financial guarantee contracts and loan commitments that are not measured at fair value through profit or loss.

## Note 1 Summary of significant accounting policies (continued)

Expected credit losses will be recognized on the following basis:

- A maximum of 12-month ECLs are required to be recognized from initial recognition, reflecting the portion of lifetime cash shortfalls that will result if a default occurs in the 12 months after the reporting date (or a shorter period if the expected life is less), weighted by the risk of that default occurring. Respective instruments are referred to as instruments in stage 1.
- Lifetime ECLs are required to be recognized if a significant increase in credit risk (SICR) is detected subsequent to the instrument's initial recognition, reflecting lifetime cash shortfalls that will result from all possible default events over the expected life of a financial instrument, weighted by the risk of default occurring. Respective instruments are referred to as instruments in stage 2. Where an SICR is no longer observed, the instrument will move back to stage 1.
- Lifetime ECLs are always recognized for credit-impaired financial instruments, referred to as instruments in stage 3. The IFRS 9 determination of whether an instrument is credit impaired will follow substantially the same principles used to determine whether an instrument is impaired under IAS 39, i.e., is based on the occurrence of one or more loss events. However, the ECL for credit-impaired financial instruments under IFRS 9 may differ mainly due to additional forward-looking considerations required under IFRS 9. Credit-impaired exposures may include positions for which no loss has occurred or no allowance has been recognized, for example because they are expected to be fully recoverable through the collateral held. Instruments that are no longer credit impaired move back to stage 2 or stage 1.
- Changes in lifetime ECLs since initial recognition are also recognized for instruments that are purchased or originated credit impaired.

The methodology applied will calculate an individual probability-weighted unbiased ECL in line with the complexity, structure and risk profile of relevant portfolios. The following principal factors will be applied: probability of default (PD), loss given default (LGD), exposure at default (EAD) and discounting of cash flows to the reporting date, alongside an evaluation of a range of possible outcomes, forecasts of future economic conditions and information on past events and current conditions.

PDs and LGDs used in the ECL calculation will be point in time (PIT) based and consider a range of scenarios (upside, baseline, mild downside, downside) to capture material non-linearity and asymmetries, and scenario weights will be applied to reflect a likelihood of their occurrence.

UBS AG will measure ECL over the maximum contractual period it is exposed to credit risk, taking into account contractual extension, termination and prepayment options. For certain credit card facilities without a defined contractual end date, which are callable on demand and where the drawn and

undrawn portions are managed as one unit, the period over which UBS AG is exposed to credit risk exceeds the contractual notice period and therefore this longer period is used within the ECL calculation.

Qualitative and quantitative criteria are used to determine whether the credit risk on a particular instrument has significantly increased from its initial recognition. UBS AG will assess changes in an instrument's risk of default primarily based on a comparison of the annualized forward-looking and scenario-weighted lifetime PIT-based PDs at inception of the instrument and the reporting date. Additional qualitative information is considered, including internal indicators of credit risk such as days-past-due information, external market indicators of credit risk and general economic conditions, to detect significant increases in credit risk.

IFRS 9 does not provide an explicit definition of default. For the purpose of measuring expected credit losses, UBS AG will apply a definition of default that is consistent with the definition used in capital calculations and by internal credit risk management.

Overall, the level of credit losses is expected to increase under IFRS 9 alongside additional income statement volatility due to the use of forward-looking assumptions and the application of the SICR approach.

### *Hedge accounting*

IFRS 9 also includes an optional revised hedge accounting model, which further aligns the accounting treatment with the risk management practices. As permitted by the standard, UBS AG will not adopt the optional IFRS 9 hedge accounting requirements pending completion of the International Accounting Standards Board's project on macro hedge accounting strategies.

However, new mandatory hedge accounting disclosures will be adopted on 1 January 2018 as required, providing additional information on UBS AG's hedging strategies by hedged risk and hedge type.

### *Transition*

In line with transitional provisions in IFRS 9, UBS will recognize an estimated pre-tax transition impact of CHF 0.7 billion, as well as a tax credit of CHF 0.1 billion, resulting in a net reduction of CHF 0.6 billion in UBS's IFRS consolidated equity. Approximately half of this amount is attributable to the classification and measurement changes, arising predominantly from the change in measurement basis of certain financial assets that no longer qualify for amortized cost accounting due to their cash flow characteristics. The remainder of the reduction results from recognizing expected credit losses on all in-scope transactions, with the majority of the impact driven by the private and commercial mortgage portfolio in Switzerland within the Personal & Corporate Banking division. As permitted by IFRS 9, UBS AG will not restate prior-period data.

## Note 1 Summary of significant accounting policies (continued)

### Presentation

*Presentation of interest income:* In line with consequential amendments to IAS 1, *Presentation of Financial Statements*, from 1 January 2018, UBS AG will present interest income calculated using the effective interest method on assets that are subsequently measured at amortized cost and debt instruments that are measured at fair value through OCI separately in the income statement.

*Presentation of balance sheet:* Effective with UBS AG's first quarter 2018 reporting, UBS AG will make a series of presentational changes to the IFRS balance sheet reflecting the implementation of IFRS 9, alongside consequential changes to improve comparability with prior periods. The primary changes include:

- IAS 39-specific asset categories such as "Financial assets held to maturity" and "Financial assets available for sale" will be superseded by the new categories "Financial assets measured at amortized cost" and "Financial assets measured at fair value through other comprehensive income (FVOCI)."
- A new category "Financial assets at fair value not held for trading" will be created to accommodate in particular financial assets previously designated at fair value, all of which are to be mandatorily classified at fair value through profit or loss given the assets are managed on a fair value basis.
- *Brokerage receivables* and *Brokerage payables designated at fair value* will be presented as separate line items, whereas they are presented within *Other assets* and *Other liabilities*, respectively, as of 31 December 2017.
- *Other assets* and *Other liabilities* will be split between measured at amortized cost, measured at fair value through profit or loss and other non-financial assets and liabilities.
- *Cash collateral on securities borrowed* and *Reverse repurchase agreements* will be combined into a single line, "Receivables from securities financing transactions". Similarly, *Cash collateral on securities lent* and *Repurchase agreements* will be combined into a single line, "Payables from securities financing transactions".
- Financial liabilities designated at fair value will be split into two lines, "Debt issued designated at fair value" and "Other financial liabilities designated at fair value".

The table on the next page illustrates the new balance sheet presentation of assets and liabilities in comparison with our current presentation. The presentation of the components of equity will not change, and therefore for illustration purposes total liabilities and equity are presented in a single line in the table on the next page. To support comparability, we will present prior-period information for periods ending before 1 January 2018 in this revised structure, beginning with the first quarter 2018 financial report. This table does not reflect any of the effects of adoption from the classification and measurement requirements of IFRS 9, *Financial Instruments*, which are only applicable for the periods ending after 1 January 2018. As permitted by the standard, we will not restate prior periods for classification and measurement or ECL changes with the adoption of IFRS 9.

## Note 1 Summary of significant accounting policies (continued)

### 2018 balance sheet presentation changes

<i>CHF million</i>	31.12.17 Presentation in the 2017 financial statements	31.12.17 Revised presentation applicable beginning 2018
<b>Assets</b>		
Cash and balances at central banks	87,775	87,775
Loans and advances to banks (formerly: Due from banks)	13,693	13,693
Receivables from securities financing transactions (new line)		89,633
Cash collateral on securities borrowed (newly included in Receivables from securities financing transactions)	12,393	
Reverse repurchase agreements (newly included in Receivables from securities financing transactions)	77,240	
Cash collateral receivables on derivative instruments	23,434	23,434
Loans and advances to customers (formerly: Loans)	321,718	320,659
Financial assets held to maturity (superseded)	9,166	
Other financial assets measured at amortized cost (new line)		36,935
<b>Total financial assets measured at amortized cost</b>		<b>572,129</b>
Financial assets at fair value held for trading (formerly: Trading portfolio assets)	130,807	126,244
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	<i>35,363</i>	<i>35,363</i>
Derivative financial instruments (formerly: Positive replacement values)	118,229	118,229
Brokerage receivables (new line, formerly included within Other assets)	n/a	n/a
Financial assets at fair value not held for trading (new line)		58,556
Financial assets designated at fair value	58,556	
<b>Total financial assets measured at fair value through profit or loss</b>		<b>303,028</b>
Financial assets available for sale (superseded)	8,665	
<b>Financial assets measured at fair value through other comprehensive income (new line)<sup>1</sup></b>		<b>8,665</b>
Investments in associates	1,018	1,018
Property, equipment and software	7,985	7,985
Goodwill and intangible assets	6,398	6,398
Deferred tax assets	9,783	9,783
Other non-financial assets (new line)		7,358
<b>Total non-financial assets</b>		<b>32,541</b>
Other assets (superseded)	29,505	
<b>Total assets</b>	<b>916,363</b>	<b>916,363</b>
<b>Liabilities</b>		
Amounts due to banks	7,533	7,533
Payables from securities financing transactions (new line)		17,044
Cash collateral on securities lent (newly included in Payables from securities financing transactions)	1,789	
Repurchase agreements (newly included in Payables from securities financing transactions)	15,255	
Cash collateral payables on derivative instruments	30,247	30,247
Customer deposits (formerly: Due to customers)	447,141	447,141
Debt issued measured at amortized cost	104,749	104,749
Other financial liabilities measured at amortized cost (new line)		37,133
<b>Total financial liabilities measured at amortized cost</b>		<b>643,847</b>
Financial liabilities at fair value held for trading (formerly: Trading portfolio liabilities)	30,463	30,463
Derivative financial instruments (formerly: Negative replacement values)	116,134	116,134
Brokerage payables designated at fair value (new line, formerly included within Other liabilities)	n/a	n/a
Financial liabilities designated at fair value (superseded)	54,202	
Debt issued designated at fair value (new line)		49,502
Other financial liabilities designated at fair value (new line)		16,223
<b>Total financial liabilities measured at fair value through profit or loss</b>		<b>212,323</b>
Provisions	3,084	3,084
Other non-financial liabilities (new line)		6,335
<b>Total non-financial liabilities</b>		<b>9,419</b>
Other liabilities (superseded)	54,990	
<b>Total liabilities</b>	<b>865,588</b>	<b>865,588</b>
<b>Total liabilities and equity</b>	<b>916,363</b>	<b>916,363</b>

<sup>1</sup> Consists of debt instruments.



## Note 1 Summary of significant accounting policies (continued)

### *IFRS 15, Revenue from Contracts with Customers*

UBS AG will adopt IFRS 15, *Revenue from Contracts with Customers*, which replaces IAS 18, *Revenue* for periods beginning on 1 January 2018. IFRS 15 establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied. In particular, the standard now specifies that variable consideration is only recognized to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

IFRS 15 also provides guidance on when revenues and expenses should be presented on a gross or net basis and establishes a cohesive set of disclosure requirements for information on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

UBS AG will adopt the standard on a modified retrospective basis that does not require comparatives to be restated. Instead, the cumulative effect of initially applying the standard will be recognized as an adjustment to the opening balance of retained earnings. The transition adjustment will not be material.

IFRS 15 will result in a deferral of some performance-based fees in Asset Management and research revenues in the Investment Bank. However, the impact on UBS AG's revenues is not expected to be material.

UBS AG will also present certain fee and commission income and expense on a gross basis, rather than net basis, if UBS AG is acting as a principal. *Fee and commission income* will be reported in the income statement separately from *Fee and commission expense*. The supporting note disclosure for fee and commission income will be enhanced to provide more information on the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers.

### *IAS 28, Investments in Associates and Joint Ventures*

In October 2017, the IASB issued an amendment to IAS 28, *Investments in Associates and Joint Ventures* that clarified that IFRS 9 must be applied when accounting for long-term interests in an associate or joint venture to which the equity method of accounting is not applied. The amendment is mandatorily effective for accounting periods beginning on or after 1 January 2019. However, UBS AG will early adopt this amendment from 1 January 2018 to align with the mandatory application date of IFRS 9, and expects that it will have no material impact on its financial statements.

### *Amendments to IFRS 2, Share-based Payment*

In June 2016, the IASB issued amendments to IFRS 2, *Share-based Payment*, which are mandatorily effective as of 1 January 2018. The amendments clarify that the approach used to account for vesting and non-vesting conditions when measuring cash-settled share-based payments is consistent with that used for equity-settled share-based payments. The amendments also clarify the classification of share-based payments settled net of withholding tax as well as the accounting consequences resulting from a modification of share-based payments from cash-settled to equity-settled. The adoption of these amendments will not have a material impact on UBS AG's financial statements.

### *IFRIC 22, Foreign Currency Transactions and Advance Consideration*

In December 2016, the IFRS Interpretations Committee of the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration* (IFRIC 22), which clarifies that in circumstances when an advance consideration is received or paid before recognizing an associated asset, expense or income, the exchange rate to be used on initial recognition of the related asset, expense or income is the rate determined as of the date of transaction – i.e., the date of initial recognition of the non-monetary asset or non-monetary liability arising from the receipt or payment of advance consideration. UBS AG is required to apply IFRIC 22 from 1 January 2018. The adoption of this IFRS Interpretation will not have a material impact on UBS AG's financial statements.

### *Effective from 2019*

### *IFRS 16, Leases*

In January 2016, the IASB issued IFRS 16, *Leases*, which replaces IAS 17, *Leases* and is mandatorily effective as of 1 January 2019. The standard substantially changes how lessees must account for operating lease commitments, requiring a lease liability with a corresponding right-of-use asset to be recognized on the balance sheet, compared with the current off-balance sheet treatment of such leases. UBS AG expects to report an increase in assets and liabilities from adoption as of 1 January 2019 in line with its disclosure of undiscounted operating lease commitments as set out in Note 31.

## Note 1 Summary of significant accounting policies (continued)

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### *IFRIC 23, Uncertainty over Income Tax Treatments*

In June 2017, the IASB issued IFRIC Interpretation 23, *Uncertainty over Income Tax Treatments* (IFRIC 23), which addresses how uncertain tax positions should be accounted for under IFRS. Under this interpretation, IFRIC 23 requires that, where acceptance of the tax treatment by the relevant tax authority is considered probable, it should be assumed as an accounting recognition matter that treatment of the item will ultimately be accepted. Therefore, no tax provision would be required in such cases. However, if acceptance of the tax treatment is not considered probable, the entity is required to reflect that uncertainty using an expected value (i.e., a probability-weighted approach) or the single most likely amount. IFRIC 23 is mandatorily effective for accounting periods beginning on or after 1 January 2019 and any resulting change to the tax provisions should be recognized in retained earnings. UBS AG is in the process of assessing the impact of this interpretation, which is not expected to have a material effect on its financial statements.

### *Amendments to IAS 19, Employee Benefits*

In February 2018, the IASB issued amendments to IAS 19, *Employee Benefits*, which address the accounting when a plan amendment, curtailment or settlement occurs during the reporting period. The amendments require entities to use the updated actuarial assumption to determine current service cost and net interest for the remainder of the annual reporting period after such an event. The amendments also clarify how the requirements for accounting for a plan amendment, curtailment or settlement affect the asset ceiling requirements. The amendments are effective prospectively for plan amendments, curtailments or settlements that occur on or after 1 January 2019, with earlier application permitted. UBS AG does not intend to early adopt this amendment.

### *Annual Improvements to IFRS Standards 2015–2017 Cycle*

In December 2017, the IASB issued *Annual Improvements to IFRS Standards 2015–2017 Cycle*, which resulted in amendments to IFRS 3, *Business Combinations*, IFRS 11, *Joint Arrangements*, IAS 12, *Income Taxes* and IAS 23, *Borrowing Costs*. The amendments are mandatorily effective as of 1 January 2019. UBS AG expects that the adoption of these amendments will not have a material impact on its financial statements.

## Note 2a Segment reporting

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The operational structure of UBS AG as of 31 December 2017 was comprised of Corporate Center and five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank.

### Wealth Management

Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world, except those served by Wealth Management Americas. Its clients benefit from the full spectrum of resources that UBS AG as a global firm can offer, including banking and lending solutions, wealth planning, investment management solutions and corporate finance advice. Wealth Management's guided architecture model gives clients access to a wide range of products from the world's leading third-party institutions that complement its own products.

### Wealth Management Americas

Wealth Management Americas provides advice-based solutions through financial advisors who deliver a fully integrated set of products and services specifically designed to address the needs of their clients. Its business is primarily domestic US but includes Canada and international clients booked in the US.

### Personal & Corporate Banking

Personal & Corporate Banking provides comprehensive financial products and services to private, corporate and institutional clients in Switzerland and is among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Its business is central to UBS AG's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to help clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for the other business divisions in Switzerland through client referrals. In addition, Personal & Corporate Banking manages a substantial part of UBS AG's Swiss infrastructure and banking products platform, both of which are leveraged across UBS AG.

### Asset Management

Asset Management is a large-scale and diversified asset manager, with an onshore presence in 23 countries. It offers investment capabilities and investment styles across all major traditional and alternative asset classes, as well as platform solutions and advisory support, to institutions, wholesale intermediaries and wealth management clients around the world.

### Investment Bank

The Investment Bank provides investment advice, financial solutions and capital market access in over 35 countries, with principal offices in all major financial centers. It serves corporate, institutional and wealth management clients across the globe and partners with UBS AG's wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services and also includes UBS AG Securities Research.

### Corporate Center

Corporate Center provides services to the Group through the reporting units Corporate Center – Services and Group Asset and Liability Management (Group ALM). Corporate Center also includes the Non-core and Legacy Portfolio unit.

Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Human Resources, Group Operations, Group Sourcing and Group Technology), Group Finance (excluding Group ALM), Group Legal, Group Risk Control, Group Communications & Branding, Group Regulatory & Governance, and UBS and Society.

Group ALM manages the structural risks of UBS AG's balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with UBS AG's liquidity and funding portfolios. Group ALM also seeks to optimize UBS AG's financial performance by matching assets and liabilities within the context of UBS AG's liquidity, funding and capital targets and constraints. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into UBS AG's risk governance framework.

Non-core and Legacy Portfolio manages legacy positions from businesses exited by the Investment Bank, and is overseen by a committee chaired by the Group Chief Risk Officer.

## Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the year ended 31 December 2017</b>									
Net interest income	2,088	1,562	1,916	(32)	1,194	(354)	83	23	6,480
Non-interest income	5,286	6,676	1,772	2,058	6,891	464	(68)	48	23,127
Allocations from CC – Group ALM	256	115	181	18	(344)	120	(264)	(83)	0
Income <sup>1</sup>	7,629	8,353	3,869	2,044	7,741	231	(249)	(11)	29,606
Credit loss (expense) / recovery	(4)	(4)	(19)	0	(90)	0	0	(11)	(128)
Total operating income	7,626	8,349	3,850	2,044	7,651	231	(249)	(22)	29,479
Personnel expenses	2,355	5,177	833	716	2,950	2,565	34	43	14,673
General and administrative expenses	605	677	294	234	715	6,147	26	113	8,811
Services (to) / from CC and other BDs	2,372	1,281	1,131	512	2,767	(8,274)	(13)	224	0
<i>of which: services from CC – Services</i>	<i>2,294</i>	<i>1,262</i>	<i>1,224</i>	<i>549</i>	<i>2,674</i>	<i>(8,338)</i>	<i>142</i>	<i>194</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	3	2	13	1	10	899	0	0	928
Amortization and impairment of intangible assets <sup>2</sup>	7	41	0	3	12	7	0	0	70
Total operating expenses <sup>3</sup>	5,342	7,178	2,271	1,466	6,453	1,344	47	380	24,481
<b>Operating profit / (loss) before tax</b>	<b>2,284</b>	<b>1,171</b>	<b>1,579</b>	<b>578</b>	<b>1,198</b>	<b>(1,113)</b>	<b>(296)</b>	<b>(403)</b>	<b>4,998</b>
Tax expense / (benefit)									4,077
<b>Net profit / (loss)</b>									<b>921</b>
<b>Additional Information</b>									
Total assets	123,003	67,071	135,587	14,270	263,046	19,447	247,739	46,200	916,363
Additions to non-current assets	89	27	15	1	3	1,478	0	0	1,612

<sup>1</sup> Impairments of financial assets available for sale for the year ended 31 December 2017 totaled CHF 15 million, of which CHF 13 million was recorded in Asset Management. <sup>2</sup> Refer to Note 15 for more information. <sup>3</sup> Refer to Note 30 for information on restructuring expenses.

## Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the year ended 31 December 2016</b>									
Net interest income	1,932	1,347	1,892	(33)	1,006	(322)	559	3	6,383
Non-interest income	4,975	6,320	1,768	1,957	6,951	250	(229)	84	22,075
Allocations from CC – Group ALM	389	118	332	7	(260)	36	(512)	(110)	0
Income <sup>1</sup>	7,296	7,785	3,990	1,931	7,697	(36)	(183)	(23)	28,458
Credit loss (expense) / recovery	(5)	(3)	(6)	0	(11)	0	0	(13)	(37)
Total operating income	7,291	7,782	3,984	1,931	7,686	(36)	(183)	(36)	28,421
Personnel expenses	2,348	4,819	843	727	3,081	3,674	31	66	15,591
General and administrative expenses	653	597	286	242	852	4,312	17	731	7,690
Services (to) / from CC and other BDs	2,348	1,235	1,079	505	2,757	(8,156)	(49)	280	0
<i>of which: services from CC – Services</i>	<i>2,256</i>	<i>1,221</i>	<i>1,186</i>	<i>530</i>	<i>2,667</i>	<i>(8,196)</i>	<i>110</i>	<i>225</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	2	2	15	1	21	938	0	0	980
Amortization and impairment of intangible assets <sup>2</sup>	4	50	0	4	12	21	0	0	91
Total operating expenses <sup>3</sup>	5,355	6,702	2,224	1,480	6,724	790	(1)	1,077	24,352
<b>Operating profit / (loss) before tax</b>	<b>1,936</b>	<b>1,081</b>	<b>1,761</b>	<b>451</b>	<b>962</b>	<b>(826)</b>	<b>(182)</b>	<b>(1,113)</b>	<b>4,069</b>
Tax expense / (benefit)									781
<b>Net profit / (loss)</b>									<b>3,288</b>
<b>Additional Information</b>									
Total assets	115,539	65,882	139,945	12,026	242,388	23,813	267,275	68,485	935,353
Additions to non-current assets	26	4	23	1	3	1,741	0	0	1,798

<sup>1</sup> Impairments of financial assets available for sale for the year ended 31 December 2016 totaled CHF 5 million, of which CHF 3 million was recorded in Asset Management. <sup>2</sup> Refer to Note 15 for more information. <sup>3</sup> Refer to Note 30 for information on restructuring expenses.

## Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the year ended 31 December 2015</b>									
Net interest income	1,825	1,067	1,890	(34)	1,573	(337)	724	21	6,729
Non-interest income	5,859	6,213	1,603	2,077	7,525	434	383	(101)	23,993
Allocations from CC – Group ALM	471	104	421	15	(211)	145	(832)	(114)	0
Income <sup>1</sup>	8,155	7,384	3,913	2,057	8,889	243	275	(195)	30,721
Credit loss (expense) / recovery	0	(4)	(37)	0	(68)	0	0	(8)	(117)
Total operating income	8,155	7,381	3,876	2,057	8,821	243	275	(203)	30,605
Personnel expenses	2,532	4,579	873	729	3,220	3,875	30	116	15,954
General and administrative expenses	650	848	264	233	882	4,517	21	804	8,219
Services (to) / from CC and other BDs	2,289	1,209	1,077	502	2,816	(8,214)	(57)	379	0
<i>of which: services from CC – Services</i>	<i>2,209</i>	<i>1,193</i>	<i>1,180</i>	<i>523</i>	<i>2,730</i>	<i>(8,243)</i>	<i>96</i>	<i>313</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	5	3	17	2	26	866	0	0	918
Amortization and impairment of intangible assets <sup>2</sup>	3	51	0	8	24	21	0	0	107
Total operating expenses <sup>3</sup>	5,478	6,689	2,231	1,475	6,969	1,065	(6)	1,298	25,198
<b>Operating profit / (loss) before tax</b>	<b>2,676</b>	<b>692</b>	<b>1,646</b>	<b>583</b>	<b>1,852</b>	<b>(822)</b>	<b>281</b>	<b>(1,501)</b>	<b>5,407</b>
Tax expense / (benefit)									(908)
<b>Net profit / (loss)</b>									<b>6,314</b>
<b>Additional Information</b>									
Total assets	119,850	60,993	141,174	12,874	253,571	22,866	237,560	94,369	943,256
Additions to non-current assets	6	4	14	1	18	1,844	0	1	1,888

<sup>1</sup> Impairments of financial assets available for sale for the year ended 31 December 2015 totaled CHF 1 million, all in Wealth Management. <sup>2</sup> Refer to Note 15 for more information. <sup>3</sup> Refer to Note 30 for information on restructuring expenses.

## Note 2b Segment reporting by geographic location

The operating regions shown in the table below correspond to the regional management structure of UBS AG. The allocation of operating income to these regions reflects, and is consistent with, the basis on which the business is managed and its performance is evaluated. These allocations involve assumptions and judgments that management considers to be reasonable, and may be refined to reflect changes in estimates or management structure. The main principles of the allocation methodology are that client revenues are attributed to the

domicile of the client and trading and portfolio management revenues are attributed to the country where the risk is managed. This revenue attribution is consistent with the mandate of the regional Presidents. Certain revenues, such as those related to Corporate Center – Non-core and Legacy Portfolio, are managed at a global level. These revenues are included in the *Global* line.

The geographic analysis of non-current assets is based on the location of the entity in which the assets are recorded.

### For the year ended 31 December 2017

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	12.0	41	7.2	47
<i>of which: USA</i>	11.4	39	6.7	44
Asia Pacific	4.7	16	0.7	5
Europe, Middle East and Africa	6.0	20	1.6	10
Switzerland	6.9	23	5.9	38
Global	0.0	0	0.0	0
<b>Total</b>	<b>29.5</b>	<b>100</b>	<b>15.4</b>	<b>100</b>

### For the year ended 31 December 2016

	Total operating income <sup>1</sup>		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.5	40	7.4	47
<i>of which: USA</i>	11.0	39	7.0	44
Asia Pacific	4.2	15	0.6	4
Europe, Middle East and Africa	6.1	21	1.8	11
Switzerland	6.9	24	6.0	38
Global	(0.3)	(1)	0.0	0
<b>Total</b>	<b>28.4</b>	<b>100</b>	<b>15.8</b>	<b>100</b>

### For the year ended 31 December 2015

	Total operating income <sup>1</sup>		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.2	37	7.1	47
<i>of which: USA</i>	10.5	34	6.7	44
Asia Pacific	5.1	17	0.5	3
Europe, Middle East and Africa	6.8	22	1.7	11
Switzerland	7.2	24	5.9	39
Global	0.4	1	0.0	0
<b>Total</b>	<b>30.6</b>	<b>100</b>	<b>15.2</b>	<b>100</b>

<sup>1</sup> The geographical allocation of Total operating income has been restated to reflect a refinement in the allocation methodology.

## Income statement notes

### Note 3 Net interest and trading income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Net interest and trading income<sup>1</sup></b>			
Net interest income	6,480	6,383	6,729
of which: Wealth Management	2,344	2,331	2,326
of which: Wealth Management Americas	1,680	1,467	1,174
of which: Personal & Corporate Banking	2,086	2,199	2,270
of which: Asset Management	(14)	(24)	(17)
Net trading income	4,974	4,943	5,696
of which: Wealth Management	694	667	708
of which: Wealth Management Americas	332	372	362
of which: Personal & Corporate Banking	375	333	343
of which: Asset Management	(10)	(5)	12
<b>Total net interest and trading income</b>	<b>11,454</b>	<b>11,326</b>	<b>12,425</b>
of which: Investment Bank	4,283	4,275	5,186
of which: Corporate Client Solutions	1,065	822	1,001
of which: Investor Client Services	3,218	3,453	4,185
of which: Corporate Center	(316)	(289)	61
of which: Services	(47)	(92)	(1)
of which: Group ALM	(199)	(134)	375
of which: own credit on financial liabilities designated at fair value			553
of which: Non-core and Legacy Portfolio	(71)	(62)	(313)
<b>Net interest income</b>			
<b>Interest income</b>			
Interest income from loans and deposits <sup>2,3,4</sup>	8,475	9,566	8,626
Interest income from securities financing transactions <sup>5</sup>	1,542	1,136	896
Interest income from trading portfolio <sup>6</sup>	2,565	2,465	3,071
Interest income from financial assets and liabilities designated at fair value	548	361	194
Interest income from financial assets available for sale and held to maturity <sup>6</sup>	260	253	391
Interest income from derivative instruments designated as cash flow hedges <sup>2</sup>	818		
<b>Total</b>	<b>14,208</b>	<b>13,782</b>	<b>13,178</b>
<b>Interest expense</b>			
Interest expense on loans and deposits <sup>2,7</sup>	2,464	1,664	774
Interest expense on securities financing transactions <sup>8</sup>	1,444	1,233	976
Interest expense on trading portfolio <sup>9</sup>	1,506	1,614	1,670
Interest expense on financial assets and liabilities designated at fair value	864	841	730
Interest expense on debt issued <sup>2</sup>	1,451	2,046	2,299
<b>Total</b>	<b>7,728</b>	<b>7,399</b>	<b>6,449</b>
<b>Net interest income</b>	<b>6,480</b>	<b>6,383</b>	<b>6,729</b>
<b>Net trading income</b>			
Investment Bank Corporate Client Solutions	597	188	321
Investment Bank Investor Client Services	2,813	3,330	3,494
Other business divisions and Corporate Center	1,564	1,425	1,882
<b>Net trading income</b>	<b>4,974</b>	<b>4,943</b>	<b>5,696</b>
of which: net gains / (losses) from financial assets designated at fair value	2,527	(186)	(119)
of which: net gains / (losses) from financial liabilities designated at fair value <sup>10</sup>	(3,920)	(1,362)	3,701

<sup>1</sup> Net interest and trading income presented for business divisions and Corporate Center units includes allocations from Corporate Center – Group ALM. <sup>2</sup> Effective 1 January 2017, the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships was refined. Refer to Note 1b for more information. <sup>3</sup> Includes interest income on impaired loans and advances of CHF 12 million for 2017, CHF 21 million for 2016 and CHF 16 million for 2015. <sup>4</sup> Consists of interest income from balances with central banks, amounts due from banks and loans, and negative interest on amounts due to banks and customers. <sup>5</sup> Includes interest income on securities borrowed and reverse repurchase agreements and negative interest, including fees, on securities lent and repurchase agreements. <sup>6</sup> Includes dividend income. <sup>7</sup> Consists of interest expense on amounts due to banks and customers, and negative interest on balances with central banks, amounts due from banks and loans. <sup>8</sup> Includes interest expense on securities lent and repurchase agreements and negative interest, including fees, on securities borrowed and reverse repurchase agreements. <sup>9</sup> Includes expense related to dividend payment obligations on trading liabilities. <sup>10</sup> Excludes fair value changes of hedges related to financial liabilities designated at fair value and foreign currency translation effects arising from translating foreign currency transactions into the respective functional currency, both of which are reported within Net trading income.



#### Note 4 Net fee and commission income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Underwriting fees	1,321	994	1,290
<i>of which: equity underwriting fees</i>	837	516	836
<i>of which: debt underwriting fees</i>	484	478	455
M&A and corporate finance fees	683	733	737
Brokerage fees	3,441	3,544	3,930
Investment fund fees	3,219	3,155	3,567
Portfolio management and advisory fees	8,542	8,035	7,858
Other	1,811	1,747	1,678
<b>Total fee and commission income</b>	<b>19,018</b>	<b>18,207</b>	<b>19,060</b>
Brokerage fees paid	660	757	869
Other	1,144	1,003	1,007
<b>Total fee and commission expense</b>	<b>1,804</b>	<b>1,760</b>	<b>1,876</b>
<b>Net fee and commission income</b>	<b>17,214</b>	<b>16,447</b>	<b>17,184</b>
<i>of which: net brokerage fees</i>	2,780	2,786	3,060

#### Note 5 Other income

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Associates, joint ventures and subsidiaries</b>			
Net gains / (losses) from disposals of subsidiaries <sup>1</sup>	37 <sup>2</sup>	(150)	264
Share of net profits of associates and joint ventures	75	106	169
Impairment charges related to associates	(7)		
<b>Total</b>	<b>105</b>	<b>(44)</b>	<b>433</b>
<b>Financial assets available for sale</b>			
Net gains / (losses) from disposals	193	346	252
Impairment charges	(15)	(5)	(1)
<b>Total</b>	<b>178</b>	<b>342</b>	<b>251</b>
Net income from properties (excluding net gains / (losses) from disposals) <sup>3</sup>	23	25	28
Net gains / (losses) from disposals of properties held for sale	0	125	378
Net gains / (losses) from disposals of loans and receivables	15	(3)	26
Income from shared services provided to UBS Group AG or its subsidiaries	385 <sup>4</sup>	48	0
Other	234 <sup>2</sup>	192	(5)
<b>Total other income</b>	<b>939</b>	<b>685</b>	<b>1,112</b>

<sup>1</sup> Includes foreign exchange gains / (losses) reclassified from Other comprehensive income related to disposed foreign subsidiaries and branches. <sup>2</sup> Net gains / (losses) from disposals of subsidiaries and Other include a net gain on sale of subsidiaries and businesses of CHF 153 million in Asset Management. Refer to Note 30 for more information. <sup>3</sup> Includes net rent received from third parties and net operating expenses. <sup>4</sup> The increase in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information.

## Note 6 Personnel expenses

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Salaries <sup>1</sup>	5,323	6,136	6,260
Variable compensation – performance awards <sup>2</sup>	2,996	2,963	3,209
<i>of which: guarantees for new hires</i>	36	30	38
Variable compensation – other <sup>2</sup>	227	418	346
<i>of which: replacement payments<sup>3</sup></i>	69	86	76
<i>of which: forfeiture credits</i>	(104)	(73)	(86)
<i>of which: severance payments<sup>4</sup></i>	93	217	157
<i>of which: retention plan and other payments<sup>5</sup></i>	169	188	198
Wealth Management Americas: Financial advisor compensation <sup>2,6</sup>	3,986	3,697	3,552
Contractors	313	420	365
Social security	717	734	817
Pension and other post-employment benefit plans <sup>7</sup>	591	669	807
Other personnel expenses	521	554	597
<b>Total personnel expenses<sup>8</sup></b>	<b>14,673<sup>9</sup></b>	<b>15,591</b>	<b>15,954</b>

<sup>1</sup> Includes role-based allowances. <sup>2</sup> Refer to Note 27 for more information. <sup>3</sup> Replacement payments are payments made to compensate employees for deferred awards forfeited as a result of joining UBS. <sup>4</sup> Includes legally obligated and standard severance payments. <sup>5</sup> Includes interest expense related to Deferred Contingent Capital Plan awards. <sup>6</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. <sup>7</sup> Refer to Note 26 for more information. <sup>8</sup> Includes net restructuring expenses of CHF 362 million, CHF 731 million and CHF 458 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 30 for more information. <sup>9</sup> The decrease in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information.

## Note 7 General and administrative expenses

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Occupancy	848	921	928
Rent and maintenance of IT and other equipment	415	511	510
Communication and market data services	534	624	610
Administration <sup>1</sup>	3,560	1,069	855
<i>of which: shared services costs charged by UBS Group AG or its subsidiaries</i>	2,974 <sup>2</sup>	365	223
Marketing and public relations	332	465	484
Travel and entertainment	374	411	456
Professional fees	1,064	1,225	1,351
Outsourcing of IT and other services	1,147	1,592	1,742
Provisions for litigation, regulatory and similar matters <sup>3</sup>	420	795	1,087
Other	116	78	195
<b>Total general and administrative expenses<sup>4</sup></b>	<b>8,811<sup>2</sup></b>	<b>7,690</b>	<b>8,219</b>

<sup>1</sup> Administration costs include net expenses related to the UK bank levy of CHF 17 million, CHF 123 million and CHF 166 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. 2017 included a CHF 82 million credit related to prior years. <sup>2</sup> The increase in 2017 in shared services costs charged by UBS Group AG or its subsidiaries and the associated decrease in certain direct cost lines were mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information. <sup>3</sup> Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 20 for more information. Also includes recoveries from third parties of CHF 53 million, CHF 13 million and CHF 10 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. <sup>4</sup> Includes net restructuring expenses of CHF 818 million, CHF 700 million and CHF 760 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 30 for more information.

## Note 8 Income taxes

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Tax expense / (benefit)</b>			
<b>Swiss</b>			
Current	402	429	230
Deferred	21	635	329
<b>Non-Swiss</b>			
Current	427	350	476
Deferred	3,227	(633)	(1,943)
<b>Total income tax expense / (benefit) recognized in the income statement</b>	<b>4,077</b>	<b>781</b>	<b>(908)</b>

### Income tax recognized in the income statement

An income tax expense of CHF 4,077 million was recognized for UBS AG in 2017, which included a net Swiss tax expense of CHF 423 million and a net non-Swiss tax expense of CHF 3,654 million.

The Swiss tax expense included a current tax expense of CHF 402 million related to taxable profits earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 21 million, which reflected a net decrease in deferred tax assets (DTAs) previously recognized in relation to tax losses carried forward and temporary differences.

The non-Swiss tax expense included a current tax expense of CHF 427 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 3,227 million, which reflected a net decrease in DTAs previously recognized in relation to tax losses carried forward and temporary differences and mainly related to the write-down of US DTAs resulting from the reduction in the federal corporate tax rate to 21% from 35% after the enactment of the Tax Cuts and Jobs Act (TCJA) during the fourth quarter of 2017.

UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its DTAs, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing DTAs. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Operating profit / (loss) before tax	4,998	4,069	5,407
of which: Swiss	1,878	2,607	3,665
of which: non-Swiss	3,120	1,462	1,742
Income taxes at Swiss tax rate of 21%	1,050	854	1,135
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	224	71	(69)
Tax effects of losses not recognized	168	185	107
Previously unrecognized tax losses now utilized	(358)	(39)	(107)
Non-taxable and lower taxed income	(298)	(343)	(273)
Non-deductible expenses and additional taxable income	573	914	519
Adjustments related to prior years – current tax	(13)	22	29
Adjustments related to prior years – deferred tax	5	2	(48)
Change in deferred tax valuation allowances	(161)	(978)	(2,419)
Adjustments to deferred tax balances arising from changes in tax rates	2,824	19	191
Other items	63	72	26
<b>Income tax expense / (benefit)</b>	<b>4,077</b>	<b>781</b>	<b>(908)</b>

## Note 8 Income taxes (continued)

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The tax expense of CHF 4,077 million for 2017 was higher than the tax expense of CHF 781 million in 2016, mainly as 2017 included a net write-down of DTAs of CHF 2,865 million resulting from the aforementioned reduction in the US federal corporate tax rate.

The components of operating profit before tax, and the differences between income tax expense reflected in the financial statements and the amounts calculated at the Swiss tax rate, are provided in the table on the previous page and explained below.

### Non-Swiss tax rates differing from Swiss tax rate

To the extent that UBS AG profits or losses arise outside Switzerland, the applicable local tax rate may differ from the Swiss tax rate. This item reflects, for such profits or losses, an adjustment from the tax expense / benefit that would arise at the Swiss tax rate and the tax expense / benefit that would arise at the applicable local tax rate. If an entity generates a profit, a tax expense arises where the local tax rate is in excess of the Swiss tax rate and a tax benefit arises where the local tax rate is below the Swiss tax rate. Conversely, if an entity incurs a loss, a tax benefit arises where the local tax rate is in excess of the Swiss tax rate and a tax expense arises where the local tax rate is less than the Swiss tax rate.

### Tax effects of losses not recognized

This item relates to tax losses of entities arising in the year, which are not recognized as DTAs. Consequently, no tax benefit arises in relation to those losses. Therefore, the tax benefit calculated by applying the local tax rate to those losses as described above is reversed.

### Previously unrecognized tax losses now utilized

This item relates to taxable profits of the year, which are offset by tax losses of previous years, for which no DTAs were previously recorded. Consequently, no current tax or deferred tax expense arises in relation to those taxable profits. Therefore, the tax expense calculated by applying the local rate on those profits is reversed.

### Non-taxable and lower taxed income

This item relates to profits for the year, which are either permanently not taxable or are taxable, but at a lower rate of tax than the local tax rate. It also includes any permanent deductions made for tax purposes, which are not reflected in the accounts.

### Non-deductible expenses and additional taxable income

This item mainly relates to income for the year, which is imputed for tax purposes for an entity, but is not included in its operating profit. In addition, it includes expenses for the year that are permanently non-deductible.

### Adjustments related to prior years – current tax

This item relates to adjustments to current tax expense for prior years, for example, if the tax payable for a year agreed with the tax authorities is expected to differ from the amount previously reflected in the financial statements.

### Adjustments related to prior years – deferred tax

This item relates to adjustments to deferred tax positions recognized in prior years, for example, if a tax loss for a year is fully recognized and the amount of the tax loss agreed with the tax authorities is expected to differ from the amount previously recognized as DTAs in the accounts.

## Note 8 Income taxes (continued)

### Change in deferred tax valuation allowances

This item includes revaluations of DTAs previously recognized resulting from reassessments of expected future taxable profits. It also includes changes in temporary differences in the year, for which deferred tax is not recognized. The amount in the year mainly relates to the upward revaluation of DTAs.

### Adjustments to deferred tax balances arising from changes in tax rates

This item relates to remeasurements of DTAs and liabilities recognized due to changes in tax rates. These have the effect of changing the future tax saving that is expected from tax losses or deductible tax differences and therefore the amount of DTAs recognized or, alternatively, changing the tax cost of additional taxable income from taxable temporary differences and therefore the deferred tax liability. This item primarily relates to the net write-down of DTAs following a reduction in the US federal corporate tax rate to 21% from 35% after the enactment of the TCJA during the fourth quarter of 2017.

### Other items

Other items include other differences between profits or losses at the local tax rate and the actual local tax expense or benefit, including increases in provisions for uncertain positions in relation to the current year and other items.

### Income tax recognized directly in equity

Certain tax expenses and benefits were recognized directly in equity, which included the following items:

- a net tax benefit of CHF 354 million recognized in other comprehensive income (OCI), which included a tax benefit of CHF 160 million related to cash flow hedges (2016: benefit of CHF 170 million), a tax expense of CHF 7 million related to financial assets classified as available for sale (2016: benefit of CHF 28 million), a tax benefit of CHF 196 million related to foreign currency translation gains and losses (2016: expense of CHF 84 million), a tax benefit of CHF 6 million related to defined benefit plans (2016: benefit of CHF 52 million) and a tax expense of CHF 1 million (2016: benefit of CHF 5 million) related to own credit
- a tax benefit of CHF 16 million recognized in share premium (2016: benefit of CHF 25 million)
- the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than Swiss francs, which are included in foreign currency translation movements in OCI.

### Deferred tax assets and liabilities

UBS AG has DTAs related to tax loss carry-forwards and other items as shown in the table below. As of 31 December 2017, DTAs of CHF 1,185 million (31 December 2016: CHF 1,689 million) were recognized by entities that incurred losses in either the current or preceding year based on projections of future taxable profits. The valuation allowance reflects DTAs that were not recognized because it was not considered probable that future taxable profits will be available to utilize the related tax loss carry-forwards and deductible temporary differences.

CHF million	31.12.17			31.12.16		
	Gross	Valuation allowance	Recognized	Gross	Valuation allowance	Recognized
<b>Deferred tax assets<sup>1</sup></b>						
Tax loss carry-forwards	16,934	(11,191)	5,743	24,627	(16,430)	8,197
Temporary differences	5,016	(975)	4,040	6,335	(1,388)	4,947
<i>of which: related to compensation and benefits</i>	1,133	(222)	911	1,419	(208)	1,211
<i>of which: related to trading assets</i>	473	(58)	414	935	(118)	817
<i>of which: related to investments in subsidiaries and goodwill</i>	2,327	0	2,327	2,059	0	2,059
<i>of which: other</i>	1,083	(695)	388	1,922	(1,062)	859
<b>Total deferred tax assets</b>	<b>21,949</b>	<b>(12,166)</b>	<b>9,783</b>	<b>30,962</b>	<b>(17,818)</b>	<b>13,144</b>
<b>Deferred tax liabilities</b>						
Goodwill and intangible assets			18			24
Other			31			20
<b>Total deferred tax liabilities</b>			<b>49</b>			<b>44</b>

<sup>1</sup> Less deferred tax liabilities as applicable.

## Note 8 Income taxes (continued)

As of 31 December 2017, tax loss carry-forwards totaling CHF 46,232 million (31 December 2016: CHF 49,477 million), which are not recognized as DTAs, were available to be offset against future taxable profits. These tax losses expire as outlined in the table below.

### Unrecognized tax loss carry-forwards

<i>CHF million</i>	31.12.17	31.12.16
Within 1 year	167	0
From 2 to 5 years	103	66
From 6 to 10 years	3,185	909
From 11 to 20 years	26,015	32,603
No expiry	16,762	15,899
<b>Total</b>	<b>46,232</b>	<b>49,477</b>

In general, Swiss tax losses can be carried forward for seven years, US federal tax losses incurred before 31 December 2017 for 20 years and US federal tax losses incurred after 31 December 2017 and also UK and Jersey tax losses for an unlimited period.

UBS AG recognizes deferred tax liabilities on undistributed earnings of subsidiaries, except to the extent that those earnings are indefinitely invested. As of 31 December 2017, no such earnings were considered indefinitely invested.

The Financial Statements have been prepared on the basis that UBS Limited is able to offset part of its taxable profits against losses transferred from UBS AG. During 2016, the UK tax authorities indicated that they do not agree with this tax return filing position, but the authorities have now advised UBS that they accept that a transfer can occur and have also accepted UBS's proposed methods to calculate the amount of losses to be transferred as adopted on the tax return filing position.

## Note 9 Earnings per share (EPS) and shares outstanding

In 2015, UBS AG shares were delisted from the SIX Swiss Exchange and the New York Stock Exchange. As of 31 December 2017, 100% of UBS AG's issued shares were held by UBS Group AG and therefore were not publicly traded. Accordingly, earnings per share information is not provided for UBS AG.

## Balance sheet notes: assets

### Note 10 Due from banks and loans (held at amortized cost)

<i>CHF million</i>	<b>31.12.17</b>	31.12.16
<b>By type of exposure</b>		
Due from banks, gross	<b>13,695</b>	13,128
Allowance for credit losses	<b>(3)</b>	(3)
Due from banks, net	<b>13,693</b>	13,125
Loans, gross		
Residential mortgages	<b>144,431</b>	142,197
Commercial mortgages	<b>18,717</b>	19,765
Lombard loans	<b>115,059</b>	104,999
Other loans <sup>1</sup>	<b>40,987</b>	37,160
Finance lease receivables <sup>2</sup>	<b>1,069</b>	986
Securities	<b>2,113</b>	2,494
Subtotal	<b>322,376</b>	307,601
Allowance for credit losses	<b>(658)</b>	(596)
Loans, net	<b>321,718</b>	307,004
<b>Total due from banks and loans, net<sup>3</sup></b>	<b>335,411</b>	320,129

<sup>1</sup> Includes corporate loans. <sup>2</sup> Refer to Note 31 for more information. <sup>3</sup> Refer to Note 25b for more information on collateral and credit enhancements.

## Note 11 Allowances and provisions for credit losses

CHF million

	Specific allowances	Collective allowances	Total allowances – due from banks and loans	Allowances – other assets	Provisions <sup>1</sup>	Total 31.12.17	Total 31.12.16
<b>By movement</b>							
Balance at the beginning of the year	587	12	599	0	54	653	727
Write-offs / usage of provisions	(115)	(2)	(117)	0	0	(117)	(145)
Recoveries	19	1	19	0	0	20	22
Increase / (decrease) recognized in the income statement	145	3	148	0	(21)	128	37
Foreign currency translation	(7)	0	(7)	0	0	(7)	0
Other	19	0	19	18	0	37	12
<b>Balance at the end of the year</b>	<b>648</b>	<b>13</b>	<b>661</b>	<b>19</b>	<b>33</b>	<b>713</b>	<b>653</b>

<sup>1</sup> Represents provisions for loan commitments and guarantees. Refer to Note 20 for more information. Refer to the "Treasury management" section of this report for the maximum irrevocable amount of loan commitments and guarantees.

	Specific allowances	Collective allowances	Total allowances	Allowances – other assets	Provisions <sup>1</sup>	Total 31.12.17	Total 31.12.16
<b>By balance sheet line</b>							
Due from banks	3	0	3			3	3
Loans	645	13	658			658	596
Other assets				19		19	0
Provisions					33	33	54
<b>Balance at the end of the year</b>	<b>648</b>	<b>13</b>	<b>661</b>	<b>19</b>	<b>33</b>	<b>713</b>	<b>653</b>

<sup>1</sup> Represents provisions for loan commitments and guarantees.



## Note 12 Derivative instruments and hedge accounting

### Derivatives: overview

A derivative is a financial instrument for which the value is derived from one or more variables (underlyings). Underlyings may be indices, foreign currency exchange or interest rates, or the value of shares, commodities, bonds or other financial instruments. A derivative commonly requires little or no initial net investment by either counterparty to the trade.

The majority of derivative contracts are negotiated with respect to notional amounts, tenor, price and settlement mechanisms, as is customary with other financial instruments.

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement between UBS and its counterparties. Terms are negotiated directly with counterparties and the contracts have industry-standard settlement mechanisms prescribed by ISDA. Recent rules, introduced by regulators in various jurisdictions, require or will soon require the payment and collection of initial and variation margin on certain OTC derivative contracts, which may have a bearing on their price and other relevant terms.

The industry continues to promote the use of central counterparties (CCPs) to clear OTC trades. The trend toward CCP clearing and settlement will generally facilitate the reduction of systemic credit exposures.

Other derivative contracts are standardized in terms of their amounts and settlement dates, and are bought and sold on regulated exchanges. These are commonly referred to as exchange-traded derivatives (ETD) contracts. Exchanges offer the benefits of pricing transparency, standardized daily settlement of changes in value and consequently reduced credit risk.

For presentation purposes, UBS AG's derivative contracts are subject to IFRS netting provisions. Derivative instruments are measured at fair value and generally classified as *Positive replacement values* and *Negative replacement values* on the balance sheet. However, ETD that are economically settled on a daily basis and OTC derivatives that are either legally settled or in substance net settled on a daily basis are classified as *Cash collateral receivables on derivative instruments* or *Cash collateral payables on derivative instruments*. Changes in the replacement values of derivatives are recorded in *Net trading income*, except for interest on derivatives designated as hedging instruments in effective hedge accounting relationships and forward points on certain short duration foreign exchange contracts that are recorded in *Net interest income*.

→ Refer to Note 1a items 3j and 3k for more information

→ Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements

UBS AG uses various derivative instruments for both trading and hedging purposes. Derivative product types as well as valuation principles and techniques applied by UBS AG are described in Note 22. *Positive replacement values* represent the estimated amount UBS AG would receive if the derivative contract were sold on the balance sheet date. *Negative replacement values* indicate the estimated amount UBS AG would pay to transfer its obligations in respect of the underlying contract were it required or entitled to do so on the balance sheet date.

Derivatives embedded in other financial instruments are not included in the "Derivative instruments" table within this Note. Bifurcated embedded derivatives are presented on the same balance sheet line as the host contract. In cases where UBS applies the fair value option to hybrid instruments, bifurcation of an embedded derivative component is not required and as such this component is also not included in the "Derivative instruments" table.

→ Refer to Notes 18 and 22 for more information

### Risks of derivative instruments

Derivative instruments are transacted in many trading portfolios, which generally include several types of instruments, not just derivatives. The market risk of derivatives is predominantly managed and controlled as an integral part of the market risk of these portfolios. UBS AG's approach to market risk is described in the audited portions of "Market risk" in the "Risk management and control" section of this report.

Derivative instruments are also transacted with many different counterparties, most of whom are also counterparties for other types of business. The credit risk of derivatives is managed and controlled in the context of UBS AG's overall credit exposure to its counterparties. UBS AG's approach to credit risk is described in the audited portions of "Credit risk" in the "Risk management and control" section of this report. It should be noted that, although the positive replacement values shown on the balance sheet can be an important component of UBS AG's credit exposure, the positive replacement values related to a respective counterparty are rarely an adequate reflection of UBS AG's credit exposure in its derivatives business with that counterparty. This is generally the case because, on the one hand, replacement values can increase over time (potential future exposure), while on the other hand, exposure may be mitigated by entering into master netting agreements and bilateral collateral arrangements. Both the exposure measures used internally by UBS AG to control credit risk and the capital requirements imposed by regulators reflect these additional factors.

→ Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements

## Note 12 Derivative instruments and hedge accounting (continued)

### Derivative instruments<sup>1</sup>

CHF billion	31.12.17					31.12.16				
	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>
<b>Interest rate contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts <sup>6</sup>	0.1	22.1	0.3	8.2	2,321.1	0.1	29.6	0.1	21.9	2,242.8
Swaps	35.4	539.2	28.2	453.7	7,530.2	45.2	599.3	38.3	552.6	7,064.2
Options	8.5	558.1	9.8	547.2		12.6	478.1	13.9	480.6	
Exchange-traded contracts										
Futures					455.6					326.4
Options	0.0	22.7	0.0	34.4	155.4	0.0	45.4	0.0	4.5	96.2
Agency transactions <sup>7</sup>	0.0		0.0			0.2		0.2		
<b>Total</b>	<b>44.0</b>	<b>1,142.1</b>	<b>38.4</b>	<b>1,043.6</b>	<b>10,462.2</b>	<b>58.0</b>	<b>1,152.4</b>	<b>52.5</b>	<b>1,059.6</b>	<b>9,729.6</b>
<b>Credit derivative contracts</b>										
Over-the-counter (OTC) contracts										
Credit default swaps	2.7	85.2	3.0	94.4	1.2	3.7	116.9	3.9	135.2	
Total return swaps	0.2	2.2	0.8	3.9		0.2	3.3	0.9	4.3	
Options and warrants	0.0	4.3	0.0	0.1		0.0	2.9	0.0	0.1	
<b>Total</b>	<b>2.8</b>	<b>91.8</b>	<b>3.8</b>	<b>98.3</b>	<b>1.2</b>	<b>3.9</b>	<b>123.1</b>	<b>4.8</b>	<b>139.6</b>	
<b>Foreign exchange contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts	17.2	681.4	17.8	691.6		21.8	715.6	19.0	650.9	
Interest and currency swaps	23.8	1,275.5	21.8	1,098.4		43.2	1,220.8	42.0	1,115.0	
Options	6.1	427.0	5.8	397.6		11.1	530.3	11.0	513.7	
Exchange-traded contracts										
Futures					0.4					6.1
Options	0.0	4.7	0.1	5.6		0.0	2.9	0.1	6.0	
Agency transactions <sup>7</sup>	0.0		0.0			0.0		0.0		
<b>Total</b>	<b>47.1</b>	<b>2,388.5</b>	<b>45.5</b>	<b>2,193.3</b>	<b>0.4</b>	<b>76.1</b>	<b>2,469.6</b>	<b>72.1</b>	<b>2,285.6</b>	<b>6.1</b>
<b>Equity / index contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Swaps	3.4	71.2	5.5	100.4		3.6	76.5	4.8	69.0	
Options	5.8	76.6	8.2	125.0		3.7	49.6	5.8	92.8	
Exchange-traded contracts										
Futures					51.9					33.0
Options	6.9	232.6	6.9	261.2	31.0	3.8	142.5	4.6	155.8	21.6
Agency transactions <sup>7</sup>	6.2		6.1			6.9		6.9		
<b>Total</b>	<b>22.2</b>	<b>380.3</b>	<b>26.7</b>	<b>486.6</b>	<b>82.9</b>	<b>18.0</b>	<b>268.6</b>	<b>22.1</b>	<b>317.6</b>	<b>54.5</b>

Table continues on the next page.

## Note 12 Derivative instruments and hedge accounting (continued)

### Derivative instruments<sup>1</sup> (continued)

Table continued from the previous page.

#### Derivative instruments (continued)<sup>1</sup>

CHF billion	31.12.17					31.12.16				
	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>	PRV <sup>2</sup>	Notional values related to PRV <sup>3</sup>	NRV <sup>4</sup>	Notional values related to NRV <sup>3</sup>	Other notional values <sup>3,5</sup>
<b>Commodity contracts</b>										
Over-the-counter (OTC) contracts										
Forward contracts	0.1	2.9	0.1	3.8		0.3	4.8	0.1	2.7	
Swaps	0.2	8.5	0.4	12.8		0.4	10.9	0.5	13.4	
Options	0.3	11.3	0.1	7.9		0.5	14.1	0.2	9.9	
Exchange-traded contracts										
Futures					8.2					9.1
Forward contracts	0.2	9.4	0.0	7.9		0.1	5.9	0.0	4.6	
Options	0.0	1.0	0.1	4.4	0.3	0.0	3.2	0.1	5.3	0.0
Agency transactions <sup>7</sup>	0.9		0.9			0.9		0.9		
<b>Total</b>	<b>1.7</b>	<b>33.1</b>	<b>1.6</b>	<b>36.9</b>	<b>8.4</b>	<b>2.3</b>	<b>39.0</b>	<b>2.0</b>	<b>35.9</b>	<b>9.1</b>
Unsettled purchases of non-derivative financial instruments <sup>8</sup>	0.1	12.0	0.1	10.9		0.1	18.4	0.1	9.7	
Unsettled sales of non-derivative financial instruments <sup>8</sup>	0.1	14.8	0.1	8.7		0.1	13.0	0.2	11.5	
<b>Total derivative instruments, based on IFRS netting<sup>9</sup></b>	<b>118.2</b>	<b>4,062.6</b>	<b>116.1</b>	<b>3,878.3</b>	<b>10,555.0</b>	<b>158.4</b>	<b>4,084.0</b>	<b>153.8</b>	<b>3,859.6</b>	<b>9,799.3</b>

<sup>1</sup> Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The replacement values and related notional values of these derivatives were not material for the periods presented. <sup>2</sup> PRV: positive replacement value. <sup>3</sup> In cases where replacement values are presented on a net basis on the balance sheet, the respective notional values of the netted replacement values are still presented on a gross basis. <sup>4</sup> NRV: negative replacement value. <sup>5</sup> Other notional values relate to derivatives that are cleared through either a central clearing counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments and was not material for the periods presented. <sup>6</sup> Negative replacement values as of 31 December 2017 include CHF 0.0 billion related to derivative loan commitments (31 December 2016: CHF 0.1 billion). No notional amounts related to these replacement values are included in the table. The maximum irrevocable amount related to these commitments was CHF 5.3 billion as of 31 December 2017 (31 December 2016: CHF 14.3 billion). <sup>7</sup> Notional values of exchange-traded agency transactions and OTC-cleared transactions entered into on behalf of clients are not disclosed due to their significantly different risk profile. <sup>8</sup> Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as replacement values. <sup>9</sup> Refer to Note 24 for more information on netting arrangements.

The notional amount of a derivative is generally the quantity of the underlying instrument on which the derivative contract is based and is the reference against which changes in the value of the derivative are measured. Notional values in themselves are generally not a direct indication of the values that are exchanged between parties, and are therefore not a direct measure of risk or financial exposure but are viewed as an indication of the scale of the different types of derivatives entered into by UBS AG.

On a notional value basis, approximately 54% of OTC interest rate contracts held as of 31 December 2017 (31 December 2016: 52%) mature within one year, 28% (31 December 2016: 29%) within one to five years and 18% (31 December 2016: 19%) after five years. Notional values of interest rate contracts cleared with a clearing house that qualify for IFRS balance sheet netting or are legally settled on a daily basis are presented under *Other notional values* and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts.

### Derivatives transacted for trading purposes

Most of UBS AG's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making to directly support the facilitation and execution of client activity. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume.

### Credit derivatives

UBS is an active dealer in the fixed income market, including credit default swaps (CDS) and related products, with respect to a large number of issuers' securities. The primary objectives of these activities are market-making, primarily on behalf of clients, and ongoing hedging of trading book exposures.

## Note 12 Derivative instruments and hedge accounting (continued)

Market-making activity, which is undertaken within the Investment Bank, consists of buying and selling single-name CDS, index CDS, loan CDS and related referenced cash instruments to facilitate client trading activity. UBS also actively utilizes CDS to economically hedge specific counterparty credit risks in its accrual and traded loan portfolios (including off-balance sheet loan commitments) with the aim of reducing concentrations in individual names, sectors or specific portfolios.

In addition, UBS actively utilizes CDS to economically hedge specific counterparty credit risks in its OTC derivative portfolios, including financial instruments that are designated at fair value through profit or loss.

The tables below provide more information on credit protection bought and sold, including replacement and notional value information by instrument type and counterparty type. The value of protection bought and sold is not, in isolation, a measure of UBS's credit risk. Counterparty relationships are viewed in terms of the total outstanding credit risk, which relates to other instruments in addition to CDS, and in connection with collateral arrangements in place. On a notional value basis, approximately 23% of credit protection bought and sold as of 31 December 2017 matures within one year (31 December 2016: 29%), approximately 65% within one to five years (31 December 2016: 61%) and approximately 12% after five years (31 December 2016: 10%).

### Credit derivatives by type of instrument

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Single-name credit default swaps	0.6	1.1	61.3	1.1	0.6	55.7
Multi-name index-linked credit default swaps	0.2	0.9	31.8	0.9	0.2	31.9
Multi-name other credit default swaps	0.0	0.0	0.1	0.0	0.0	0.0
Total rate of return swaps	0.0	0.8	4.4	0.1	0.0	1.7
Options and warrants	0.0	0.0	4.3	0.0	0.0	0.1
<b>Total 31 December 2017</b>	<b>0.8</b>	<b>2.9</b>	<b>101.9</b>	<b>2.0</b>	<b>0.9</b>	<b>89.4</b>
<i>of which: credit derivatives related to economic hedges</i>	<i>0.7</i>	<i>2.4</i>	<i>81.5</i>	<i>1.6</i>	<i>0.8</i>	<i>70.5</i>
<i>of which: credit derivatives related to market-making</i>	<i>0.0</i>	<i>0.5</i>	<i>20.3</i>	<i>0.5</i>	<i>0.0</i>	<i>18.9</i>

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Single-name credit default swaps	1.6	1.3	91.4	1.3	1.4	81.3
Multi-name index-linked credit default swaps	0.2	0.8	38.4	0.5	0.4	38.3
Multi-name other credit default swaps	0.0	0.0	1.5	0.0	0.0	1.1
Total rate of return swaps	0.1	0.7	5.5	0.0	0.2	2.1
Options and warrants	0.0	0.0	2.9	0.0	0.0	0.1
<b>Total 31 December 2016</b>	<b>2.0</b>	<b>2.8</b>	<b>139.7</b>	<b>1.9</b>	<b>2.0</b>	<b>122.9</b>
<i>of which: credit derivatives related to economic hedges</i>	<i>1.4</i>	<i>2.4</i>	<i>111.7</i>	<i>1.5</i>	<i>1.5</i>	<i>96.2</i>
<i>of which: credit derivatives related to market-making</i>	<i>0.5</i>	<i>0.3</i>	<i>28.0</i>	<i>0.4</i>	<i>0.5</i>	<i>26.7</i>

## Note 12 Derivative instruments and hedge accounting (continued)

### Credit derivatives by counterparty

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.2	0.2	16.2	0.2	0.1	12.3
Banks	0.3	0.7	37.0	0.5	0.4	31.6
Central clearing counterparties	0.1	1.1	41.5	1.0	0.1	40.6
Other	0.3	0.9	7.2	0.3	0.2	4.9
<b>Total 31 December 2017</b>	<b>0.8</b>	<b>2.9</b>	<b>101.9</b>	<b>2.0</b>	<b>0.9</b>	<b>89.4</b>

CHF billion	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.4	0.2	20.9	0.2	0.3	16.1
Banks	0.9	1.0	60.8	0.8	1.0	52.6
Central clearing counterparties	0.3	0.9	47.2	0.8	0.4	47.1
Other	0.4	0.8	10.9	0.2	0.3	7.1
<b>Total 31 December 2016</b>	<b>2.0</b>	<b>2.8</b>	<b>139.7</b>	<b>1.9</b>	<b>2.0</b>	<b>122.9</b>

UBS's CDS trades are documented using industry standard forms of documentation or equivalent terms documented in a bespoke agreement. The agreements that govern CDS generally do not contain recourse provisions that would enable UBS to recover from third parties any amounts paid out by UBS.

The types of credit events that would require UBS to perform under a CDS contract are subject to agreement between the parties at the time of the transaction. However, nearly all transactions are traded with reference to credit events that are applicable under certain market conventions based on the type of reference entity to which the transaction relates. Applicable credit events according to market conventions include bankruptcy, failure to pay, restructuring, obligation acceleration and repudiation / moratorium.

### Contingent collateral features of derivative liabilities

Certain derivative instruments contain contingent collateral or termination features triggered upon a downgrade of the published credit ratings of UBS AG in the normal course of business. Based on UBS's credit ratings as of 31 December 2017, CHF 0.1 billion, CHF 0.3 billion and CHF 1.2 billion would have been required for contractual obligations related to OTC derivatives in the event of a one-notch, two-notch and three-notch reduction in long-term credit ratings, respectively. In evaluating UBS's liquidity requirements, UBS considers additional collateral or termination payments that would be required in the event of a reduction in UBS's long-term credit ratings, and a corresponding reduction in UBS's short-term ratings.

### Derivatives transacted for hedging purposes

UBS AG enters into derivative transactions for the purposes of hedging risks inherent in assets, liabilities and forecast transactions. The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and whether the hedge qualifies as such for accounting purposes.

Derivative transactions that qualify and are designated as hedges for accounting purposes are described under the corresponding headings in this Note (fair value hedges, cash flow hedges and hedges of net investments in foreign operations).

UBS AG has also executed various hedging strategies utilizing derivatives for which hedge accounting has not been applied. These economic hedges include interest rate swaps and other interest rate derivatives (e.g., futures) for day-to-day economic interest rate risk management purposes. In addition, UBS AG has used equity futures, options and, to a lesser extent, swaps in a variety of equity trading strategies to offset underlying equity and equity volatility exposure. UBS AG has also entered into CDS that provide economic hedges for credit risk exposures (refer to "Credit derivatives" in this Note).

UBS AG's accounting policies for derivatives designated and accounted for as hedging instruments or economic hedges that do not qualify for hedge accounting are described in Note 1a item 3k, where terms used in the following sections are explained.

## Note 12 Derivative instruments and hedge accounting (continued)

### Fair value hedges: interest rate risk related to debt instruments

UBS AG's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate debt instruments, such as non-structured fixed-rate bonds, covered bonds and subordinated debt, due to

movements in market interest rates. The fair values of outstanding interest rate derivatives designated as fair value hedges were assets of CHF 47 million and liabilities of CHF 2 million as of 31 December 2017 and assets of CHF 152 million and liabilities of CHF 1 million as of 31 December 2016.

### Fair value hedges of interest rate risk

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Gains / (losses) on hedging instruments	(20)	140	554
Gains / (losses) on hedged items attributable to the hedged risk	1	(144)	(552)
<b>Net gains / (losses) representing ineffective portions of fair value hedges</b>	<b>(19)</b>	<b>(4)</b>	<b>2</b>

### Fair value hedges: portfolio interest rate risk related to loans

UBS AG also applies fair value hedge accounting to mortgage loan portfolio interest rate risk. The change in fair value of the hedged items is recorded separately from the hedged item and is included within *Other assets* on the balance sheet. The fair

values of outstanding interest rate derivatives designated for these hedges as of 31 December 2017 were liabilities of CHF 32 million (31 December 2016: liabilities of CHF 44 million).

### Fair value hedges of portfolio interest rate risk

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Gains / (losses) on hedging instruments	(11)	(128)	(176)
Gains / (losses) on hedged items attributable to the hedged risk	4	116	147
<b>Net gains / (losses) representing ineffective portions of fair value hedges</b>	<b>(7)</b>	<b>(12)</b>	<b>(29)</b>

### Cash flow hedges of forecast transactions

UBS AG is exposed to variability in future interest cash flows on non-trading financial assets and liabilities that bear interest at variable rates or are expected to be refinanced or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying the non-trading interest rate risk of UBS AG, which is hedged with interest rate swaps, the maximum maturity of which is 11 years. The table on the following page shows forecast principal balances on which expected interest cash flows arise as of 31 December 2017. Amounts shown represent, by time bucket, average assets and liabilities subject to forecast cash flows designated as hedged items in cash flow hedge accounting relationships.

As of 31 December 2017, the fair values of outstanding derivatives designated as cash flow hedges of forecast transactions were CHF 30 million assets and CHF 2 million liabilities (31 December 2016: CHF 68 million assets and CHF 5 million liabilities).

Other comprehensive income from cash flow hedges, net of tax was negative CHF 621 million, compared with negative CHF 666 million in 2016 and negative CHF 518 million in 2015. This result included the reclassification of a pre-tax net gain from *Other comprehensive income* to the income statement of CHF 826 million in 2017, compared with a pre-tax net gain of CHF 1,082 million in 2016 and a pre-tax net gain of CHF 1,199 million in 2015, partly offset by a pre-tax net fair value gain associated with the effective portion of derivative instruments designated as cash flow hedges recognized in comprehensive income of CHF 45 million in 2017, compared with a pre-tax net gain of CHF 246 million in 2016 and a pre-tax net gain of CHF 550 million in 2015.

As of 31 December 2017, the cumulative net gains associated with the effective portion of derivative instruments designated as cash flow hedges reported in *Equity* were CHF 351 million (31 December 2016: CHF 972 million).

In 2017, a gain of CHF 8 million was recognized in *Net trading income* due to hedge ineffectiveness, compared with a gain of CHF 11 million in 2016 and a gain of CHF 150 million in 2015.

## Note 12 Derivative instruments and hedge accounting (continued)

### Principal balances subject to cash flow forecasts

CHF billion	Within 1 year	1–3 years	3–5 years	5–10 years	Over 10 years
Assets	52	74	49	49	0
Liabilities	3	4	2	2	0
<b>Net balance</b>	<b>50</b>	<b>70</b>	<b>47</b>	<b>47</b>	<b>0</b>

### Hedges of net investments in foreign operations

UBS AG applies hedge accounting for certain net investments in foreign operations. As of 31 December 2017, the positive replacement values and negative replacement values of foreign exchange (FX) derivatives (mainly FX swaps) designated as hedging instruments in net investment hedge accounting relationships were CHF 78 million and CHF 130 million, respectively (31 December 2016: positive replacement values of CHF 122 million and negative replacement values of CHF 79 million). As of 31 December 2017, the underlying hedged structural exposures in several currencies amounted to CHF 8.2 billion (31 December 2016: CHF 7.5 billion).

Hedges of structural FX exposures in currencies other than the US dollar may be comprised of two jointly designated derivatives as the foreign currency risk may be hedged against the US dollar first and then converted into Swiss francs, the presentation currency of UBS AG, as part of a separate FX derivative transaction. The aggregated notional amount of designated hedging derivatives as of 31 December 2017 was CHF 13 billion in total (31 December 2016: CHF 12.5 billion), including CHF 8.1 billion notional values related to US dollar versus Swiss franc swaps and CHF 5.0 billion notional values related to derivatives hedging foreign currencies (other than the US dollar) versus the US dollar. The effective portion of gains and losses of these FX swaps is transferred directly to OCI to

offset foreign currency translation (FCT) gains and losses on the net investments in foreign branches and subsidiaries. As such, these FX swaps hedge the structural FX exposure resulting in the accumulation of FCT on the level of individual foreign branches and subsidiaries and hence on the total FCT OCI of UBS AG.

UBS designates certain non-derivative foreign currency financial assets and liabilities of foreign branches or subsidiaries as hedging instruments in net investment hedge accounting arrangements. The FX translation difference recorded in FCT OCI of the non-derivative hedging instrument of one foreign entity offsets the structural FX exposure of another foreign entity. Therefore, the aggregated FCT OCI of UBS AG is unchanged from this hedge designation. As of 31 December 2017, the nominal amount of non-derivative financial assets and liabilities designated as hedging instruments in such net investment hedges was CHF 1.4 billion and CHF 1.4 billion, respectively (31 December 2016: CHF 1.5 billion non-derivative financial assets and CHF 1.5 billion non-derivative financial liabilities).

Ineffectiveness of hedges of net investments in foreign operations was not material in 2017, 2016 and 2015.

### Undiscounted cash flows

The table below provides undiscounted cash flow information for derivative instruments designated in hedge accounting relationships.

### Derivatives designated in hedge accounting relationships (undiscounted cash flows)

CHF billion	On demand	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
<b>Interest rate swaps<sup>1</sup></b>							
<b>FX swaps / forwards</b>							
Cash inflows	0	8	4	0	0	0	12
Cash outflows	0	8	4	0	0	0	12
<b>Net cash flows</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Undiscounted cash inflows and cash outflows of interest rate swaps as of 31 December 2017 were not material as the majority of interest rate swaps designated in hedge accounting relationships are legally settled on a daily basis.

## Note 13 Financial assets available for sale and held to maturity

### a) Financial assets available for sale

<i>CHF million</i>	<b>31.12.17</b>	31.12.16
<b>Financial assets available for sale by issuer type<sup>1</sup></b>		
<b>Debt instruments</b>		
Government and government agencies	7,000	11,650
<i>of which: USA</i>	6,569	7,779
Banks	299	1,845
Corporates and other	821	1,554
<b>Total debt instruments</b>	<b>8,120</b>	15,048
<b>Equity instruments</b>	<b>546</b>	628
<b>Total financial assets available for sale</b>	<b>8,665</b>	15,676
Unrealized gains – before tax	216	309
Unrealized (losses) – before tax	(105)	(117)
<b>Net unrealized gains / (losses) – before tax</b>	<b>111</b>	193
<b>Net unrealized gains / (losses) – after tax</b>	<b>8</b>	96

<sup>1</sup> Refer to Note 22c for more information on product type and fair value hierarchy categorization.

### b) Financial assets held to maturity

<i>CHF million</i>	<b>31.12.17</b>	31.12.16
<b>Financial assets held to maturity by issuer type</b>		
<b>Debt instruments</b>		
Government and government agencies	7,476	7,416
<i>of which: USA</i>	4,833	4,688
<i>of which: Germany</i>	1,682	1,708
<i>of which: France</i>	669	867
Banks	1,689	1,873
<b>Total financial assets held to maturity</b>	<b>9,166</b>	9,289



## Note 14 Property, equipment and software

### At historical cost less accumulated depreciation

<i>CHF million</i>	Own-used properties	Leasehold improvements	IT hardware and communication	Internally generated software	Purchased software	Other machines and equipment	Projects in progress	31.12.17	31.12.16
<b>Historical cost</b>									
Balance at the beginning of the year	7,732	3,440	1,512	3,037	408	853	1,123	18,106	17,823
Additions	44	15	101	1	43	13	1,291	1,508	1,770
Disposals / write-offs <sup>1</sup>	(672)	(303)	(645)	(355)	(174)	(59)	(32)	(2,239)	(1,102)
Reclassifications	(17)	117	46	1,196	(5)	22	(1,406)	(46) <sup>6</sup>	(214)
Foreign currency translation	(2)	(43)	3	(12)	1	(15)	(1)	(70)	(171)
Balance at the end of the year	7,085	3,226	1,018	3,867	272	815	975	17,259	18,106
<b>Accumulated depreciation</b>									
Balance at the beginning of the year	4,300	2,124	1,021	1,542	233	589	0	9,809	10,140
Depreciation	153	191	133	328	48	59	0	912	954
Impairment <sup>2</sup>	(2)	8	2	6	1	1	0	15	26
Disposals / write-offs <sup>1</sup>	(373)	(298)	(432)	(155)	(100)	(55)	0	(1,413)	(1,090)
Reclassifications	(9)	4	0	0	(1)	0	0	(7) <sup>6</sup>	(147)
Foreign currency translation	(2)	(36)	5	(3)	3	(10)	0	(43)	(74)
Balance at the end of the year	4,066	1,993	729	1,719	183	583	0	9,274	9,809
<b>Net book value</b>									
Net book value at the beginning of the year	3,432	1,316	492	1,495	175	264	1,123	8,297	7,683
<b>Net book value at the end of the year<sup>3,4</sup></b>	<b>3,019</b>	<b>1,233</b>	<b>289</b>	<b>2,148</b>	<b>89</b>	<b>232</b>	<b>975<sup>5</sup></b>	<b>7,985</b>	<b>8,297</b>

<sup>1</sup> Mainly comprises CHF 819 million of assets on a net book value basis relating to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information. Also includes write-offs of fully depreciated assets. <sup>2</sup> Impairment charges recorded in 2017 relate to assets for which the recoverable amount was determined based on value-in-use. Recoverable amounts for these impaired assets were not material as of 31 December 2017. <sup>3</sup> As of 31 December 2017, contractual commitments to purchase property in the future amounted to approximately CHF 0.3 billion (31 December 2016: approximately CHF 0.3 billion). <sup>4</sup> Includes CHF 22 million related to leased assets, mainly IT hardware and communication. <sup>5</sup> Consists of CHF 754 million related to Internally generated software, CHF 188 million related to Own-used properties and CHF 33 million related to Leasehold improvements. <sup>6</sup> Reflects reclassifications to Properties held for sale (CHF 40 million on a net basis) of properties sold in 2017.

## Note 15 Goodwill and intangible assets

### Introduction

UBS AG performs an impairment test on its goodwill assets on an annual basis or when indicators of impairment exist. UBS AG considers the segments, as reported in Note 2a, as separate cash-generating units (CGUs). The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, with the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount. As of 31 December 2017, total goodwill recognized on the balance sheet was CHF 6.2 billion, of which CHF 1.3 billion, CHF 3.4 billion and CHF 1.4 billion was carried by Wealth Management, Wealth Management Americas and Asset Management, respectively. Based on the impairment testing methodology described below, UBS AG concluded that the goodwill balances as of 31 December 2017 allocated to these segments remain recoverable and thus were not impaired.

### Methodology for goodwill impairment testing

The recoverable amounts are determined using a discounted cash flow model, which has been adapted to use inputs that consider features of the banking business and its regulatory environment. The recoverable amount of a segment is the sum of the discounted earnings attributable to shareholders from the first three forecast years and the terminal value, adjusted for the effect of the capital assumed to be needed over the next three years and to support the perpetual growth implied by the long-term growth rate. The terminal value, which covers all periods beyond the third year, is calculated on the basis of the forecast of third-year profit, the discount rate and the long-term growth rate, as well as the implied perpetual capital growth.

The carrying amount for each segment is determined by reference to the Group's equity attribution framework. Within this framework, which is described in the "Capital management" section of this report, we attribute equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator, their goodwill and intangible assets as well as equity directly associated with activity that Group ALM manages centrally on behalf of the business divisions. The framework is primarily used for purposes of measuring the performance of the businesses and includes certain management assumptions. Attributed equity equals the capital that a segment requires to conduct its business and is

considered an appropriate starting point from which to determine the carrying value of the segments. The attributed equity methodology is aligned with the business planning process, the inputs from which are used in calculating the recoverable amounts of the respective CGU.

→ Refer to the "Capital management" section of this report for more information on the equity attribution framework

### Assumptions

Valuation parameters used within UBS AG's impairment test model are linked to external market information, where applicable. The model used to determine the recoverable amount is most sensitive to changes in the forecast earnings available to shareholders in years one to three, to changes in the discount rates and to changes in the long-term growth rate. The applied long-term growth rate is based on long-term economic growth rates for different regions worldwide. Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the BoD.

The discount rates are determined by applying a capital asset pricing model-based approach, as well as considering quantitative and qualitative inputs from both internal and external analysts and the view of management. The discount rates were unchanged between 2016 and 2017.

Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Forecast earnings available to shareholders were changed by 20%, the discount rates were changed by 1.5 percentage points and the long-term growth rates were changed by 0.75 percentage points. Under all scenarios, reasonably possible changes in key assumptions did not result in an impairment of goodwill or intangible assets that would be material to the consolidated financial statements or to the reported financial performance of any of the business divisions.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce IFRS equity and net profit. It would not affect cash flows and, as goodwill is required to be deducted from capital under the Basel III capital framework, no effect would be expected on UBS AG's total capital ratios.

## Note 15 Goodwill and intangible assets (continued)

### Discount and growth rates

In %	Discount rates		Growth rates	
	31.12.17	31.12.16	31.12.17	31.12.16
Wealth Management	9.0	9.0	1.7	1.7
Wealth Management Americas	9.0	9.0	2.4	2.4
Asset Management	9.0	9.0	2.4	2.4
Investment Bank	11.0	11.0	2.4	2.4

CHF million	Goodwill		Intangible assets		31.12.17	31.12.16
	Total	Infrastructure	Customer relationships, contractual rights and other	Total		
<b>Historical cost</b>						
Balance at the beginning of the year	6,311	773	739	1,512	7,823	7,821
Additions	37		64	64	101	24
Disposals	(27)		(34)	(34)	(61)	(3)
Write-offs				0	0	(75)
Foreign currency translation	(139)	(33)	(2)	(35)	(174)	57
Balance at the end of the year	6,182	741	766	1,507	7,689	7,823
<b>Accumulated amortization and impairment</b>						
Balance at the beginning of the year		626	641	1,267	1,267	1,253
Amortization		37	32	70	70	91
Impairment <sup>1</sup>			0	0	0	0
Disposals			(15)	(15)	(15)	(1)
Write-offs				0	0	(75)
Foreign currency translation		(27)	(3)	(29)	(29)	(1)
Balance at the end of the year		637	655	1,292	1,292	1,267
<b>Net book value at the end of the year</b>	<b>6,182</b>	<b>104</b>	<b>111</b>	<b>215</b>	<b>6,398</b>	<b>6,556</b>

<sup>1</sup> Impairment charges recorded in 2017 and 2016 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 0 million for 2017 and CHF 3 million for 2016).

The table below presents goodwill and intangible assets by segment for the year ended 31 December 2017.

CHF million	Wealth Management	Wealth Management Americas	Investment Bank	Asset Management	Corporate Center – Services	Total
<b>Goodwill</b>						
Balance at the beginning of the year	1,303	3,571	36	1,401		6,311
Additions	37					37
Disposals	(2)			(25)		(27)
Foreign currency translation	8	(151)	(2)	6		(139)
<b>Balance at the end of the year</b>	<b>1,346</b>	<b>3,420</b>	<b>34</b>	<b>1,382</b>		<b>6,182</b>
<b>Intangible assets</b>						
Balance at the beginning of the year	40	152	41	4	9	245
Additions / transfers	47	17				64
Disposals	(19)					(19)
Amortization	(7)	(41)	(12)	(3)	(7)	(70)
Impairment		0				0
Foreign currency translation	2	(6)	(1)	0		(5)
<b>Balance at the end of the year</b>	<b>63</b>	<b>121</b>	<b>28</b>	<b>1</b>	<b>2</b>	<b>215</b>

## Note 15 Goodwill and intangible assets (continued)

The table below presents estimated, aggregated amortization expenses for intangible assets.

<i>CHF million</i>	Intangible assets
<b>Estimated, aggregated amortization expenses for:</b>	
2018	63
2019	49
2020	42
2021	11
2022	11
Thereafter	35
Not amortized due to indefinite useful life	5
<b>Total</b>	<b>215</b>

## Note 16 Other assets

<i>CHF million</i>	31.12.17	31.12.16
Prime brokerage receivables <sup>1</sup>	19,080	9,828
Recruitment loans to financial advisors	2,553	3,087
Other loans to financial advisors	565	471
Bail deposit <sup>2</sup>	1,337	1,213
Accrued interest income	578	526
Accrued income – other	781	822
Prepaid expenses	819	1,008
Settlement and clearing accounts	716	516
VAT and other tax receivables	292	261
Properties and other non-current assets held for sale	95	111
Assets of disposal group held for sale <sup>3</sup>	0	5,137
Other	2,688	2,433
<b>Total other assets</b>	<b>29,505</b>	<b>25,412</b>

<sup>1</sup> Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage receivables are mainly comprised of margin lending receivables. <sup>2</sup> Refer to Note 20b item 1 for more information. <sup>3</sup> Refer to Note 30 for more information.

## Balance sheet notes: liabilities

### Note 17 Due to banks and customers

CHF million	31.12.17	31.12.16
Due to banks	7,533	10,645
Due to customers	447,141	450,199
of which: demand deposits	190,341	195,756
of which: retail savings / deposits	161,828	170,729
of which: time deposits <sup>1</sup>	83,773	77,531
of which: fiduciary deposits	11,200	6,184
Total due to banks and customers	454,675	460,844

<sup>1</sup> Includes Group-internal funding obtained from UBS Group AG and UBS Group Funding (Switzerland) AG of CHF 35 billion as of 31 December 2017 (31 December 2016: CHF 25 billion).

### Note 18 Financial liabilities designated at fair value

CHF million	31.12.17	31.12.16
<b>Issued debt instruments</b>		
Equity-linked <sup>1</sup>	34,162	29,831
Rates-linked	5,811	10,150
Credit-linked	2,937	4,101
Fixed-rate	3,921	2,972
Other	2,671	2,875
Total issued debt instruments	49,502	49,930
of which: issued by UBS AG with original maturity greater than one year <sup>2,3</sup>	37,266	36,347
<b>Over-the-counter debt instruments</b>		
Equity-linked <sup>1</sup>	1,350	1,992
Other	2,967	2,671
Total over-the-counter debt instruments	4,317	4,663
of which: issued by UBS AG with original maturity greater than one year <sup>2,4</sup>	3,049	4,210
<b>Repurchase agreements</b>	375	395
<b>Loan commitments and guarantees<sup>5</sup></b>	9	29
Total	54,202	55,017
of which: life-to-date own credit (gain) / loss	195	(141)

<sup>1</sup> Includes investment fund unit-linked instruments issued. <sup>2</sup> Issued by the legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. <sup>3</sup> More than 99% of the balance as of 31 December 2017 was unsecured (31 December 2016: more than 99% of the balance was unsecured). <sup>4</sup> More than 40% of the balance as of 31 December 2017 was unsecured (31 December 2016: more than 35% of the balance was unsecured). <sup>5</sup> Loan commitments recognized as Financial liabilities designated at fair value until drawn and recognized as Loans. See Note 1a item 3o for more information.

As of 31 December 2017 and 31 December 2016, the contractual redemption amount at maturity of financial liabilities designated at fair value through profit or loss was not materially different from the carrying value.

The table on the following page shows the residual contractual maturity of the carrying value of financial liabilities designated at fair value, split between fixed-rate and floating-rate instruments based on the contractual terms, and does not consider any early redemption features. Interest rate ranges for

future interest payments related to these financial liabilities designated at fair value have not been included in the table on the following page as a majority of these liabilities are structured products, and therefore the future interest payments are highly dependent upon the embedded derivative and prevailing market conditions at the time each interest payment is made.

→ **Refer to Note 25d for maturity information on an undiscounted cash flow basis**

## Note 18 Financial liabilities designated at fair value (continued)

### Contractual maturity of carrying value

CHF million	2018	2019	2020	2021	2022	2023–2027	Thereafter	Total 31.12.17	Total 31.12.16
<b>UBS AG<sup>1</sup></b>									
Non-subordinated debt									
Fixed-rate	3,339	1,350	872	401	571	511	3,610	10,653	9,505
Floating-rate	16,428	5,660	4,418	1,297	1,883	4,983	6,497	41,167	42,757
Subtotal	19,767	7,010	5,290	1,697	2,455	5,494	10,107	51,820	52,262
<b>Other subsidiaries<sup>2</sup></b>									
Non-subordinated debt									
Fixed-rate	90	797	52	74	7	345	136	1,502	1,768
Floating-rate	330	18	194	0	48	27	263	879	987
Subtotal	420	816	246	74	55	372	399	2,382	2,755
<b>Total</b>	<b>20,187</b>	<b>7,826</b>	<b>5,536</b>	<b>1,772</b>	<b>2,510</b>	<b>5,866</b>	<b>10,506</b>	<b>54,202</b>	<b>55,017</b>

<sup>1</sup> Comprises instruments issued by the legal entity UBS AG. <sup>2</sup> Comprises instruments issued by subsidiaries of UBS AG.

## Note 19 Debt issued held at amortized cost

CHF million	31.12.17	31.12.16
Certificates of deposit	23,831	20,207
Commercial paper	23,532	1,653
Other short-term debt	3,590	4,318
<b>Short-term debt<sup>1</sup></b>	<b>50,953</b>	<b>26,178</b>
Senior fixed-rate bonds	32,268	27,008
<i>of which: issued by UBS AG with original maturity greater than one year<sup>2</sup></i>	<i>32,256</i>	<i>26,850</i>
Covered bonds	4,112	5,836
Subordinated debt	8,985	11,554
<i>of which: low-trigger loss-absorbing tier 2 capital instruments</i>	<i>8,286</i>	<i>10,429</i>
<i>of which: non-Basel III-compliant tier 2 capital instruments</i>	<i>700</i>	<i>1,125</i>
Debt issued through the central bond institutions of the Swiss regional or cantonal banks	8,345	8,302
Other long-term debt	87	121
<i>of which: issued by UBS AG with original maturity greater than one year<sup>2</sup></i>	<i>66</i>	<i>94</i>
<b>Long-term debt<sup>3</sup></b>	<b>53,796</b>	<b>52,820</b>
<b>Total debt issued held at amortized cost<sup>4</sup></b>	<b>104,749</b>	<b>78,998</b>

<sup>1</sup> Debt with an original maturity of less than one year. <sup>2</sup> Issued by the legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. 100% of the balance as of 31 December 2017 was unsecured (31 December 2016: 100% of the balance was unsecured). <sup>3</sup> Debt with original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. <sup>4</sup> Net of bifurcated embedded derivatives, the fair value of which was not material for the periods presented.

UBS AG uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In certain cases, UBS AG applies hedge accounting for interest rate risk as discussed in Note 1a item 3k and Note 12. As a result of applying hedge accounting, the life-

to-date adjustment to the carrying value of debt issued was an increase of CHF 480 million as of 31 December 2017 and an increase of CHF 821 million as of 31 December 2016, reflecting changes in fair value due to interest rate movements.

## Note 19 Debt issued held at amortized cost (continued)

Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All of the subordinated debt instruments outstanding as of 31 December 2017 pay a fixed rate of interest.

The table below shows the residual contractual maturity of the carrying value of debt issued, split between fixed-rate and floating-rate based on the contractual terms, and does not consider any early redemption features. The effects from interest rate swaps, which are used to hedge various fixed-rate debt issuances by changing the repricing characteristics into those similar to floating-rate debt, are also not considered in the table below.

→ Refer to Note 25d for maturity information on an undiscounted cash flow basis

### Contractual maturity of carrying value

<i>CHF million, except where indicated</i>	2018	2019	2020	2021	2022	2023–2027	Thereafter	Total 31.12.17	Total 31.12.16
<b>UBS AG<sup>1</sup></b>									
Non-subordinated debt									
Fixed-rate	38,470	3,975	7,987	4,162	1,643	0	3	56,239	42,999
Interest rates (range in %)	0–6.6	2.4–4.0	0–4.9	0.1–1.4	4.0–4.0				
Floating-rate	21,158	4,818	3,926	0	0	0	1,223	31,125	15,937
Subordinated debt									
Fixed-rate	0	0	0	0	1,912	7,073	0	8,985	11,554
Interest rates (range in %)					7.6–7.6	4.8–8.8			
Subtotal	59,628	8,793	11,913	4,162	3,555	7,073	1,225	96,349	70,490
<b>Other subsidiaries<sup>2</sup></b>									
Non-subordinated debt									
Fixed-rate	805	747	725	1,000	835	3,384	903	8,398	8,507
Interest rates (range in %)	0.4–3.8	0.6–2.9	0.1–2.8	0.1–2.4	0.1–3.4	0.1–2.8	0.2–2.7		
Floating-rate	1	0	1	0	0	0	0	1	1
Subtotal	806	746	726	1,000	835	3,384	903	8,400	8,507
<b>Total</b>	<b>60,434</b>	<b>9,540</b>	<b>12,639</b>	<b>5,162</b>	<b>4,389</b>	<b>10,457</b>	<b>2,128</b>	<b>104,749</b>	<b>78,998</b>

<sup>1</sup> Comprises debt issued by the legal entity UBS AG. <sup>2</sup> Comprises debt issued by subsidiaries of UBS AG.

## Note 20 Provisions and contingent liabilities

### a) Provisions

<i>CHF million</i>	Operational risks <sup>1</sup>	Litigation, regulatory and similar matters <sup>2</sup>	Restructuring	Loan commitments and guarantees	Real estate	Employee benefits <sup>5</sup>	Other	Total 31.12.17	Total 31.12.16
Balance at the beginning of the year	50	3,261	498	54	138	77	91	4,169	4,163
Additions from acquired companies	0	0	0	0	0	0	7	7	0
Increase in provisions recognized in the income statement	15	682	174	11	3	11	45	941	1,430
Release of provisions recognized in the income statement	(7)	(209)	(74)	(32)	(2)	(18)	(20)	(362)	(288)
Provisions used in conformity with designated purpose	(13)	(1,230)	(280)	0	(12)	(1)	(34)	(1,571)	(1,152)
Capitalized reinstatement costs	0	0	0	0	4	0	0	4	(1)
Reclassifications	0	0	(21)	0	0	(14)	0	(36)	7
Foreign currency translation / unwind of discount	(3)	(59)	(2)	0	(5)	1	1	(68)	10
<b>Balance at the end of the year</b>	<b>43</b>	<b>2,444</b>	<b>294<sup>3</sup></b>	<b>33</b>	<b>125<sup>4</sup></b>	<b>55</b>	<b>89</b>	<b>3,084</b>	<b>4,169</b>

<sup>1</sup> Comprises provisions for losses resulting from security risks and transaction processing risks. <sup>2</sup> Comprises provisions for losses resulting from legal, liability and compliance risks. <sup>3</sup> Primarily consists of personnel-related restructuring provisions of CHF 54 million as of 31 December 2017 (31 December 2016: CHF 150 million) and provisions for onerous lease contracts of CHF 235 million as of 31 December 2017 (31 December 2016: CHF 348 million). <sup>4</sup> Consists of reinstatement costs for leasehold improvements of CHF 86 million as of 31 December 2017 (31 December 2016: CHF 85 million) and provisions for onerous lease contracts of CHF 39 million as of 31 December 2017 (31 December 2016: CHF 53 million). <sup>5</sup> Includes provisions for sabbatical and anniversary awards as well as provisions for severance that are not part of restructuring provisions.

Restructuring provisions primarily relate to onerous lease contracts and severance payments. The use of onerous lease provisions is driven by the maturities of the underlying lease contracts. Severance-related provisions are used within a short time period, usually within six months, but potential changes in amount may be triggered when natural staff attrition reduces

the number of people affected by a restructuring and therefore the estimated costs.

Information on provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 20b. There are no material contingent liabilities associated with the other classes of provisions.

### b) Litigation, regulatory and similar matters

UBS operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this Note may refer to UBS AG and / or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where UBS may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which UBS believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. UBS makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that UBS has a present legal or constructive obligation as a result of past

events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS, but are nevertheless expected to be, based on UBS's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to such matters could be significant.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.



## Note 20 Provisions and contingent liabilities (continued)

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either (a) we have not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard, or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in the "Provisions" table in Note 20a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require us to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although we therefore cannot

provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, we believe that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions. Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the Non-Prosecution Agreement (NPA) described in item 5 of this Note, which we entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with our submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate (LIBOR), was terminated by the DOJ based on its determination that we had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a fine and is subject to probation through January 2020. A guilty plea to, or conviction of, a crime could have material consequences for UBS. Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate our participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining our capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of this report.

### Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit<sup>1</sup>

CHF million	Wealth		Personal & Corporate Banking	Asset		CC – Services	CC –		Total	Total
	Management	Management Americas		Management	Investment Bank		Group ALM	Non-core and Legacy Portfolio		
Balance at the beginning of the year	292	425	78	5	616	259	0	1,585	<b>3,261</b>	2,983
Increase in provisions recognized in the income statement	30	158	3	6	8	248	0	229	<b>682</b>	856
Release of provisions recognized in the income statement	(4)	(12)	(1)	(9) <sup>2</sup>	(49)	(6)	0	(129)	<b>(209)</b>	(48)
Provisions used in conformity with designated purpose	(135)	(207)	(2)	(1)	(216)	(262)	0	(406)	<b>(1,230)</b>	(554)
Foreign currency translation / unwind of discount	24	(17)	2	0	(15)	1	0	(55)	<b>(59)</b>	25
<b>Balance at the end of the year</b>	<b>207</b>	<b>348</b>	<b>79</b>	<b>1</b>	<b>345</b>	<b>240</b>	<b>0</b>	<b>1,224</b>	<b>2,444</b>	3,261

<sup>1</sup> Provisions, if any, for the matters described in this Note are recorded in Wealth Management (item 3), Wealth Management Americas (item 4), the Investment Bank (item 7) and Corporate Center – Non-core and Legacy Portfolio (item 2). Provisions, if any, for the matters described in items 1 and 6 of this Note are allocated between Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this Note in item 5 are allocated between the Investment Bank, Corporate Center – Services and Corporate Center – Non-core and Legacy Portfolio. <sup>2</sup> In 2017, a release of CHF 5 million was recognized in Provisions for litigation, regulatory and similar matters, with a corresponding increase in Other provisions.

## Note 20 Provisions and contingent liabilities (continued)

### 1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that the implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration (FTA) to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests.

The Swiss Federal Administrative Court ruled in 2016 that in the administrative assistance proceedings related to a French bulk request, UBS has the right to appeal all final FTA client data disclosure orders.

Since 2013, UBS (France) S.A. and UBS AG and certain former employees have been under investigation in France for alleged complicity in having illicitly solicited clients on French territory and regarding the laundering of proceeds of tax fraud and of banking and financial solicitation by unauthorized persons. In connection with this investigation, the investigating judges ordered UBS AG to provide bail ("*caution*") of EUR 1.1 billion and UBS (France) S.A. to post bail of EUR 40 million, which was reduced on appeal to EUR 10 million.

In February 2016, the investigating judges notified UBS AG and UBS (France) S.A. that they have closed their investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation ("*réquisitoire*"). In March 2017, the investigating judges issued the trial order ("*ordonnance de renvoi*") that charges UBS AG and UBS (France) S.A., as well as various former employees, with illicit solicitation of clients on French territory and with participation in the laundering of the proceeds of tax fraud, and which transfers the case to court. The trial schedule has not yet been announced. In October 2017, the Investigation Chamber of the Court of Appeals decided that UBS (France) S.A. shall not be constituted as a civil party in the guilty plea proceedings against the former UBS (France) S.A. Head of Front Office. UBS (France) S.A. has appealed this decision to the French Supreme Court ("*Cour de cassation*").

In 2016, UBS was notified by the Belgian investigating judge that it is under formal investigation ("*inculpé*") regarding the laundering of proceeds of tax fraud and of banking, financial solicitation by unauthorized persons and serious tax fraud.

In 2015, UBS received inquiries from the US Attorney's Office for the Eastern District of New York and from the US Securities and Exchange Commission (SEC), which are investigating potential sales to US persons of bearer bonds and other unregistered securities in possible violation of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the registration requirements of the US securities laws. UBS is cooperating with the authorities in these investigations. In 2018, UBS was informed by the US Attorney's Office and the SEC that they have closed their investigations and that they will not take any action.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

Our balance sheet at 31 December 2017 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities (RMBS) and was a purchaser and seller of US residential mortgages. A subsidiary of UBS, UBS Real Estate Securities Inc. (UBS RESI), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

UBS was not a significant originator of US residential loans. A branch of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008, and securitized less than half of these loans.

## Note 20 Provisions and contingent liabilities (continued)

*Lawsuits related to contractual representations and warranties concerning mortgages and RMBS:* When UBS acted as an RMBS sponsor or mortgage seller, it generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, UBS was in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. In 2012, certain RMBS trusts filed an action (Trustee Suit) in the US District Court for the Southern District of New York (SDNY) seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion. Approximately 9,000 loans were at issue in a bench trial in the SDNY in 2016, following which the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. In October 2017, UBS and certain holders of the RMBS in the Trustee Suit entered into an agreement under which UBS has agreed to pay an aggregate of USD 543 million into the relevant RMBS trusts, plus certain attorneys' fees. A portion of these settlement costs will be borne by other parties that indemnified UBS. The agreement is subject to the trustee for the RMBS trusts becoming a party thereto by 9 March 2018. The trustee for the RMBS trusts has evaluated the proposed settlement under the agreement between UBS and the RMBS holders and UBS has been in discussions with the trustee about the terms on which it would become a party to a settlement. Giving effect to a settlement of the Trustee Suit, UBS considers claims relating to substantially all loan repurchase demands to be resolved, and believes that new demands to repurchase US residential mortgage loans are time-barred under a decision rendered by the New York Court of Appeals.

*Mortgage-related regulatory matters:* In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and subsequently provided a revised list of transactions. UBS has provided information in response to this subpoena. UBS has also received and responded to subpoenas

from the New York State Attorney General (NYAG) and other state attorneys general relating to UBS's RMBS business. In 2017, the NYAG identified a number of transactions that are the focus of its inquiry. In addition, UBS responded to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US Attorney's Office for Connecticut and the DOJ) and the SEC relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. UBS is cooperating with the authorities in these matters.

Our balance sheet at 31 December 2017 reflected a provision with respect to matters described in this item 2 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. (now UBS Europe SE, Luxembourg branch) and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier (CSSF). Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds faced severe losses, and the Luxembourg funds are in liquidation. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees, seeking amounts aggregating approximately EUR 2.1 billion, which includes amounts that the funds may be held liable to pay the trustee for the liquidation of BMIS (BMIS Trustee).

## Note 20 Provisions and contingent liabilities (continued)

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A large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff fraud. The majority of these cases have been filed in Luxembourg, where decisions that the claims in eight test cases were inadmissible have been affirmed by the Luxembourg Court of Appeal, and the Luxembourg Supreme Court has dismissed a further appeal in one of the test cases.

In the US, the BMIS Trustee filed claims against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. In 2014, the US Supreme Court rejected the BMIS Trustee's motion for leave to appeal decisions dismissing all claims except those for the recovery of fraudulent conveyances and preference payments. In 2016, the Bankruptcy Court dismissed the remaining claims against the UBS entities. The BMIS Trustee appealed. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to those made by the BMIS Trustee, and seeking unspecified damages. These claims have either been voluntarily withdrawn or dismissed on the basis that the courts did not have jurisdiction to hear the claims against the UBS entities. In 2016, the plaintiff in one of those claims appealed the dismissal. In February 2018, the United States Court of Appeals for the Second Circuit affirmed the dismissal of the plaintiff's claim.

### 4. Puerto Rico

Declines since 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (funds) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (UBS PR) have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of USD 2.4 billion, of which claims with aggregate claimed damages of USD 1.4 billion have been resolved through settlements, arbitration or withdrawal of the claim. The claims are filed by clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and / or who used their UBS account assets as collateral for UBS non-purpose loans; customer complaint and arbitration allegations include fraud, misrepresentation and unsuitability of the funds and of the loans. A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants' motion to dismiss was denied.

Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management and the co-manager of certain of the funds, seeking damages for investor losses in the funds during the period from May 2008 through May 2014. In 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendant's motion for summary judgment based on a forum selection clause in the loan agreements. The Puerto Rico Supreme Court reversed that decision and remanded the case back to the trial court for reconsideration. On reconsideration the trial court granted defendant's motion and dismissed the action.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico (OCFI) in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority (FINRA) announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. We also understand that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. We are cooperating with the authorities in this inquiry.

In 2011, a purported derivative action was filed on behalf of the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. In 2016, the court granted the System's request to join the action as a plaintiff, but ordered that plaintiffs must file an amended complaint. In 2017, the court denied defendants' motion to dismiss the amended complaint.

## Note 20 Provisions and contingent liabilities (continued)

Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain closed-end funds and certain members of UBS PR senior management, seeking damages for investor losses in the funds during the period from January 2008 through May 2012. In 2016, the court denied plaintiffs' motion for class certification. In March 2017, the US Court of Appeals for the First Circuit denied plaintiffs' petition seeking permission to bring an interlocutory appeal challenging the denial of their motion for class certification.

Beginning in 2015, certain agencies and public corporations of the Commonwealth of Puerto Rico (Commonwealth) defaulted on certain interest payments, in 2016, the Commonwealth defaulted on payments on its general obligation debt (GO Bonds), and in 2017 the Commonwealth defaulted on payments on its debt backed by the Commonwealth's Sales and Use Tax (COFINA Bonds) as well as on bonds issued by the Commonwealth's Employee Retirement System (ERS Bonds). The funds hold significant amounts of both COFINA and ERS Bonds and the defaults on interest payments are expected to adversely affect dividends from the funds. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors' rights on the Puerto Rico bonds continue to be in effect. In 2016, US federal legislation created an oversight board with power to oversee Puerto Rico's finances and to restructure its debt. The oversight board is authorized to impose, and has imposed, a stay on exercise of creditors' rights. In May and June 2017, the oversight board placed the GO, COFINA and ERS Bonds, among others, into a bankruptcy-like proceeding under the supervision of a Federal District Judge as authorized by the oversight board's enabling statute. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth's finances, or any restructuring of the Commonwealth's obligations may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

Our balance sheet at 31 December 2017 reflected provisions with respect to matters described in this item 4 in amounts that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that we have recognized.

### 5. Foreign exchange, LIBOR and benchmark rates, and other trading practices

*Foreign exchange-related regulatory matters:* Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes our

precious metals and related structured products businesses. Numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. In 2014 and 2015, UBS reached settlements with the UK Financial Conduct Authority (FCA) and the US Commodity Futures Trading Commission (CFTC) in connection with their foreign exchange investigations, FINMA issued an order concluding its formal proceedings relating to UBS's foreign exchange and precious metals businesses, and the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Connecticut Department of Banking issued a Cease and Desist Order and assessed monetary penalties against UBS AG. In addition, the DOJ's Criminal Division (Criminal Division) terminated the 2012 Non-Prosecution Agreement (NPA) with UBS AG related to UBS's submissions of benchmark interest rates and UBS AG pleaded guilty to one count of wire fraud, paid a fine and is subject to probation through January 2020. In January 2018, UBS reached a settlement with the CFTC in connection with the CFTC's precious metals investigations. As part of that settlement, UBS paid a USD 15 million civil monetary penalty. UBS has ongoing obligations to cooperate with these authorities and to undertake certain remediation. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ (Antitrust Division) and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses. Refer to Note 20b in the "Consolidated financial statements" section of the Annual Report 2016 for more information on regulatory actions related to foreign exchange and precious metals and grants of conditional immunity or leniency. Investigations relating to foreign exchange and precious metals matters by certain authorities remain ongoing notwithstanding these resolutions.

*Foreign exchange-related civil litigation:* Putative class actions have been filed since 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In 2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 2003. The complaints assert claims under the Commodity Exchange Act (CEA) and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

## Note 20 Provisions and contingent liabilities (continued)

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A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 (ERISA) for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal. The appeals court heard oral argument in June 2017.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of a putative class of persons and businesses in the US who directly purchased foreign currency from the defendants and their co-conspirators for their own end use. That action was transferred to federal court in New York. In March 2017, the court granted UBS's (and the other banks') motions to dismiss the complaint. The plaintiffs filed an amended complaint in August 2017.

In 2016, a putative class action was filed in federal court in New York against UBS and numerous other banks on behalf of a putative class of persons and entities who had indirectly purchased foreign exchange instruments from a defendant or co-conspirator in the US. The complaint asserts claims under federal and state antitrust laws. In response to defendants' motion to dismiss, plaintiffs agreed to dismiss their complaint. In April and June 2017, two new putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of different proposed classes of indirect purchasers of currency, and a consolidated complaint was filed in June 2017.

In 2015, UBS was added to putative class actions pending against other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases sought to amend their complaints to add new allegations about UBS, which the court granted. The plaintiffs filed amended complaints in June 2017. In March 2017, the court in New York granted UBS's motion to dismiss the platinum and palladium action. In May 2017, plaintiffs in the platinum and palladium action filed an amended complaint that did not allege claims against UBS.

*LIBOR and other benchmark-related regulatory matters:* Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office (SFO), the Monetary Authority of Singapore (MAS), the Hong Kong Monetary Authority (HKMA), FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted or are continuing to conduct investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. In 2012, UBS reached settlements relating to benchmark interest rates with the FSA, the CFTC and the Criminal Division of the DOJ, and FINMA issued an order in its proceedings with respect to UBS relating to benchmark interest rates. In addition, UBS entered into settlements with the European Commission (EC) and with the Swiss Competition Commission (WEKO) regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives. UBS has ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation with respect to benchmark interest rate submissions. UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and WEKO, in connection with potential antitrust or competition law violations related to certain rates. However, UBS has not reached a final settlement with WEKO as the Secretariat of WEKO has asserted that UBS does not qualify for full immunity. Refer to Note 20b in the "Consolidated financial statements" section of the Annual Report 2016 for more information on regulatory actions relating to benchmark rates and grants of conditional immunity or leniency. Investigations by certain governmental authorities remain ongoing notwithstanding these resolutions.

*LIBOR and other benchmark-related civil litigation:* A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. All of the complaints allege manipulation, through various means, of various benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, USD and SGD SIBOR and SOR, Australian BBSW and USD ISDAFIX, and seek unspecified compensatory and other damages under varying legal theories.

## Note 20 Provisions and contingent liabilities (continued)

In 2013, the US district court in the USD LIBOR action dismissed the federal antitrust and racketeering claims of certain USD LIBOR plaintiffs and a portion of their claims brought under the CEA and state common law. Certain plaintiffs appealed the decision to the Second Circuit, which, in 2016, vacated the district court's ruling finding no antitrust injury and remanded the case back to the district court for a further determination on whether plaintiffs have antitrust standing. In December 2016, the district court again dismissed plaintiffs' antitrust claims, this time for lack of personal jurisdiction over UBS and other foreign banks. Certain plaintiffs appealed that decision to the Second Circuit in 2017. In 2018, the district court denied certain plaintiffs' motions for class certification. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims. In 2015, the same court dismissed plaintiff's federal racketeering claims and affirmed its previous dismissal of plaintiff's antitrust claims. In 2017, the court also dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds, as did the court in the CHF LIBOR action. Also in 2017, the courts in the EURIBOR and the SIBOR and SOR lawsuits dismissed the cases as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs in the CHF LIBOR and SIBOR and SOR actions have filed amended complaints following the dismissals, which UBS and other defendants have moved to dismiss. UBS and other defendants in other lawsuits have also moved to dismiss the GBP LIBOR and Australian BBSW actions. In 2016, UBS entered into an agreement with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement has received preliminary court approval and remains subject to final approval. Since 2014, putative class actions have been filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX. The court has given preliminary approval of a settlement agreement under which UBS would pay USD 14 million to settle the case in its entirety.

**Government bonds:** Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY, and a consolidated complaint was filed in November 2017. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and orders referred to above,

our balance sheet at 31 December 2017 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver.

FINMA has issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among other things, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 December 2017 reflected a provision with respect to matters described in this item 6 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

### 7. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission (SFC) has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. The SFC has previously indicated that it intended to take enforcement action against UBS and certain employees in relation to certain of these offerings. In March 2018, the SFC issued a decision notice in relation to one of the offerings under investigation. The notice provides for a fine of HKD 119 million and a suspension of UBS Securities Hong Kong Limited's ability to act as a sponsor for Hong Kong listed initial public offerings for 18 months. UBS intends to appeal the decision.

## Note 21 Other liabilities

<i>CHF million</i>	<b>31.12.17</b>	31.12.16
Prime brokerage payables <sup>1</sup>	<b>29,646</b>	31,973
Amounts due under unit-linked investment contracts	<b>11,523</b>	9,286
Compensation-related liabilities	<b>4,909</b>	5,256
<i>of which: accrued expenses</i>	<b>2,372</b>	2,367
<i>of which: other deferred compensation plans</i>	<b>1,613</b>	1,623
<i>of which: net defined benefit pension and post-employment liabilities<sup>2</sup></i>	<b>925</b>	1,266
Third-party interest in consolidated investment funds	<b>269</b>	751
Settlement and clearing accounts	<b>1,380</b>	1,011
Current and deferred tax liabilities <sup>3</sup>	<b>844</b>	911
VAT and other tax payables	<b>378</b>	487
Deferred income	<b>150</b>	168
Accrued interest expenses	<b>1,533</b>	1,571
Other accrued expenses	<b>2,105</b>	2,427
Liabilities of disposal group held for sale <sup>4</sup>	<b>0</b>	5,213
Other	<b>2,252</b>	1,390
<b>Total other liabilities</b>	<b>54,990</b>	60,443

<sup>1</sup> Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage payables are mainly comprised of client securities financing and deposits. <sup>2</sup> Refer to Note 26 for more information. <sup>3</sup> Refer to Note 8 for more information. <sup>4</sup> Refer to Note 30 for more information.



# Additional information

## Note 22 Fair value measurement

This Note provides fair value measurement information for both financial and non-financial instruments and is structured as follows:

- a) Valuation principles
- b) Valuation governance
- c) Fair value hierarchy
- d) Valuation adjustments
- e) Transfers between Level 1 and Level 2
- f) Level 3 instruments: valuation techniques and inputs
- g) Level 3 instruments: sensitivity to changes in unobservable input assumptions
- h) Level 3 instruments: movements during the period
- i) Financial instruments not measured at fair value

### a) Valuation principles

Fair value is defined as the price that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market (or most advantageous market, in the absence of a principal market) as of the measurement date. In measuring fair value, UBS AG uses various valuation approaches and applies a hierarchy for prices and inputs that maximizes the use of observable market data, if available.

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which the instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 – valuation techniques for which significant inputs are not based on observable market data.

If available, fair values are determined using quoted prices in active markets for identical assets or liabilities. An active market is one in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing data on an ongoing basis. Assets and liabilities that are quoted and traded in an active market are valued at the currently quoted price multiplied by the number of units of the instrument held.

Where the market for a financial instrument or non-financial asset or liability is not active, fair value is established using a valuation technique, including pricing models. Valuation techniques involve the use of estimates, the extent of which depends on the complexity of the instrument and the availability

of market-based data. Valuation adjustments may be made to allow for additional factors, including model, liquidity, credit and funding risks, which are not explicitly captured within the valuation technique, but which would nevertheless be considered by market participants when establishing a price. The limitations inherent in a particular valuation technique are considered in the determination of an asset or liability's classification within the fair value hierarchy.

Many cash instruments and over-the-counter (OTC) derivative contracts have bid and offer prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Offer prices represent the lowest price that a party is willing to accept for an asset. In general, long positions are measured at a bid price and short positions at an offer price, reflecting the prices at which the instruments could be transferred under normal market conditions. Offsetting positions in the same financial instrument are marked at the mid-price within the bid-offer spread.

Generally, the unit of account for a financial instrument is the individual instrument, and UBS applies valuation adjustments at an individual instrument level, consistent with that unit of account. However, if certain conditions are met, UBS may estimate the fair value of a portfolio of financial assets and liabilities with substantially similar and offsetting risk exposures on the basis of the net open risks.

For transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially recognized at the transaction price. This initial recognition amount may differ from the fair value obtained using the valuation technique. Any such difference is deferred and not recognized in the income statement and referred to as deferred day-1 profit or loss.

→ Refer to Note 22d for more information

## Note 22 Fair value measurement (continued)

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### b) Valuation governance

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UBS's fair value measurement and model governance framework includes numerous controls and other procedural safeguards that are intended to maximize the quality of fair value measurements reported in the financial statements. New products and valuation techniques must be reviewed and approved by key stakeholders from risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value resides with the business divisions. In carrying out their valuation responsibilities, the businesses are required to consider the availability and quality of external market data and to provide justification and rationale for their fair value estimates.

Fair value estimates are validated by risk and finance control functions, which are independent of the business divisions.

Independent price verification is performed by Finance through benchmarking the business divisions' fair value estimates with observable market prices and other independent sources. Controls and a governance framework are in place and are intended to ensure the quality of third-party pricing sources where used. For instruments where valuation models are used to determine fair value, independent valuation and model control groups within Finance and Risk Control evaluate UBS's models on a regular basis, including valuation and model input parameters as well as pricing. As a result of the valuation controls employed, valuation adjustments may be made to the business divisions' estimates of fair value to align with independent market data and the relevant accounting standard.

→ **Refer to Note 22d for more information**

## Note 22 Fair value measurement (continued)

### c) Fair value hierarchy

The table below provides the fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value. The narrative that follows describes the different product types, valuation techniques used in measuring their fair value,

including significant valuation inputs and assumptions used, and the factors determining their classification within the fair value hierarchy.

#### Determination of fair values from quoted market prices or valuation techniques<sup>1</sup>

CHF million	31.12.17				31.12.16			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value on a recurring basis</b>								
Financial assets held for trading <sup>2</sup>	108,963	15,309	1,972	126,244	76,046	14,377	1,689	92,112
<i>of which:</i>								
Government bills / bonds	11,935	918	0	12,854	10,500	1,319	0	11,820
Corporate and municipal bonds	37	8,072	552	8,662	58	6,722	591	7,371
Loans	0	3,346	501	3,847	0	1,356	681	2,037
Investment fund units	7,223	1,839	571	9,632	6,114	3,521	63	9,698
Asset-backed securities	0	194	174	368	0	470	215	685
Equity instruments	79,276	186	105	79,566	50,916	397	65	51,378
Financial assets for unit-linked investment contracts	10,492	755	69	11,316	8,459	591	74	9,123
Positive replacement values	458	116,222	1,549	118,229	434	155,428	2,549	158,411
<i>of which:</i>								
Interest rate contracts	1	43,913	135	44,049	8	57,703	278	57,988
Credit derivative contracts	0	2,266	550	2,816	0	2,562	1,313	3,875
Foreign exchange contracts	207	46,749	189	47,145	263	75,607	222	76,092
Equity / index contracts	16	21,541	675	22,232	1	17,274	729	18,003
Commodity contracts	0	1,727	0	1,727	0	2,269	8	2,277
Financial assets designated at fair value	23,032	34,104	1,419	58,556	39,641	23,304	2,079	65,024
<i>of which:</i>								
Government bills / bonds	22,062	3,900	0	25,961	39,439	4,361	0	43,799
Corporate and municipal bonds	765	20,702	0	21,467	15	16,860	0	16,875
Loans (including structured loans)	0	9,385	758	10,143	0	2,043	1,195	3,238
Structured reverse repurchase and securities borrowing agreements	0	118	173	291	0	40	644	684
Other	205	0	489	694	187	0	240	427
Financial assets available for sale	3,000	5,157	507	8,665	6,299	8,891	486	15,676
<i>of which:</i>								
Government bills / bonds	2,733	133	0	2,866	5,444	450	0	5,894
Corporate and municipal bonds	121	1,060	9	1,189	646	4,939	12	5,596
Investment fund units	0	70	115	185	0	51	126	177
Asset-backed securities	0	3,880	0	3,880	0	3,381	0	3,381
Equity instruments	146	16	384	546	204	71	336	611
Non-financial assets								
Precious metals and other physical commodities	4,563	0	0	4,563	4,583	0	0	4,583
<b>Assets measured at fair value on a non-recurring basis</b>								
Other assets <sup>3</sup>	0	54	42	95	5,060	131	56	5,248
<b>Total assets measured at fair value</b>	<b>140,017</b>	<b>170,848</b>	<b>5,489</b>	<b>316,353</b>	<b>132,064</b>	<b>202,132</b>	<b>6,860</b>	<b>341,056</b>

## Note 22 Fair value measurement (continued)

### Determination of fair values from quoted market prices or valuation techniques (continued)<sup>1</sup>

CHF million	31.12.17				31.12.16			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Liabilities measured at fair value on a recurring basis</b>								
Trading portfolio liabilities	26,037	4,309	117	30,463	18,808	3,898	119	22,825
<i>of which:</i>								
Government bills / bonds	5,153	256	0	5,409	5,573	648	0	6,221
Corporate and municipal bonds	50	3,453	35	3,538	12	2,927	37	2,976
Investment fund units	541	263	16	820	484	91	20	595
Equity instruments	20,293	336	66	20,695	12,740	227	62	13,028
Negative replacement values	398	112,929	2,807	116,134	539	149,255	4,016	153,810
<i>of which:</i>								
Interest rate contracts	5	38,196	186	38,387	12	51,990	475	52,476
Credit derivative contracts	0	3,196	601	3,797	0	3,269	1,538	4,807
Foreign exchange contracts	213	45,151	122	45,486	274	71,668	148	72,089
Equity / index contracts	42	24,803	1,896	26,741	1	20,254	1,854	22,109
Commodity contracts	0	1,561	1	1,562	0	2,040	1	2,041
Financial liabilities designated at fair value	0	41,376	12,826	54,202	2	44,007	11,008	55,017
<i>of which:</i>								
Issued debt instruments	0	38,617	10,885	49,502	0	40,242	9,688	49,930
Over-the-counter debt instruments	0	2,385	1,930	4,315	2	3,611	1,050	4,663
Structured repurchase agreements	0	372	4	376	0	130	266	395
Loan commitments and guarantees	0	2	7	9	0	25	5	29
Other liabilities – amounts due under unit-linked investment contracts	0	11,523	0	11,523	0	9,286	0	9,286
<b>Liabilities measured at fair value on a non-recurring basis</b>								
Other liabilities <sup>3</sup>	0	1	0	1	0	5,213	0	5,213
<b>Total liabilities measured at fair value</b>	<b>26,435</b>	<b>170,139</b>	<b>15,750</b>	<b>212,324</b>	<b>19,349</b>	<b>211,660</b>	<b>15,143</b>	<b>246,152</b>

<sup>1</sup> Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The fair value of these derivatives was not material for the periods presented. <sup>2</sup> Financial assets held for trading exclude precious metals and other physical commodities. <sup>3</sup> Other assets and other liabilities primarily consist of assets held for sale as well as assets and liabilities of a disposal group held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell.

## Note 22 Fair value measurement (continued)

### Valuation techniques

Valuation techniques are used to value positions for which a market price is not available from market sources. This includes certain less liquid debt and equity instruments, certain exchange-traded derivatives and all derivatives transacted in the OTC market. UBS uses widely recognized valuation techniques for determining the fair value of financial and non-financial instruments that are not actively traded and quoted. The most frequently applied valuation techniques include discounted value of expected cash flows, relative value and option pricing methodologies.

Discounted value of expected cash flows is a valuation technique that measures fair value using estimated expected future cash flows from assets or liabilities and then discounts these cash flows using a discount rate or discount margin that reflects the credit and / or funding spreads required by the market for instruments with similar risk and liquidity profiles to produce a present value. When using such valuation techniques, expected future cash flows are estimated using an observed or implied market price for the future cash flows or by using industry standard cash flow projection models. The discount factors within the calculation are generated using industry standard yield curve modeling techniques and models.

Relative value models measure fair value based on the market prices of equivalent or comparable assets or liabilities, making adjustments for differences between the characteristics of the observed instrument and the instrument being valued.

Option pricing models incorporate assumptions regarding the behavior of future price movements of an underlying referenced asset or assets to generate a probability-weighted future expected payoff for the option. The resulting probability-weighted expected payoff is then discounted using discount factors generated from industry standard yield curve modeling techniques and models. The option pricing model may be implemented using a closed-form analytical formula or other mathematical techniques (e.g., binomial tree or Monte Carlo simulation).

Where available, valuation techniques use market-observable assumptions and inputs. If such data is not available, inputs may be derived by reference to similar assets in active markets, from recent prices for comparable transactions or from other observable market data. In such cases, the inputs selected are based on historical experience and practice for similar or analogous instruments, derivation of input levels based on similar products with observable price levels and knowledge of current market conditions and valuation approaches.

For more complex instruments and instruments not traded in an active market, fair values may be estimated using a combination of observed transaction prices, consensus pricing services and relevant quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices

provided by consensus pricing services. UBS also uses internally developed models, which are typically based on valuation methods and techniques recognized as standard within the industry.

Assumptions and inputs used in valuation techniques include benchmark interest rate curves, credit and funding spreads used in estimating discount rates, bond and equity prices, equity index prices, foreign exchange rates, levels of market volatility and correlation. Refer to Note 22f for more information. The discount curves used by UBS AG incorporate the funding and credit characteristics of the instruments to which they are applied.

### Financial instruments excluding derivatives: product description, valuation and classification in the fair value hierarchy

#### Government bills and bonds

Product description: government bills and bonds include fixed-rate, floating-rate and inflation-linked bills and bonds issued by sovereign governments.

Valuation: these instruments are generally valued using prices obtained directly from the market. Instruments that cannot be priced directly using active-market data are valued using discounted cash flow valuation techniques that incorporate market data for similar government instruments.

Fair value hierarchy: government bills and bonds are generally traded in active markets with prices that can be obtained directly from these markets, resulting in classification as Level 1, while the remaining positions are classified as Level 2.

#### Corporate and municipal bonds

Product description: corporate bonds include senior, junior and subordinated debt issued by corporate entities. Municipal bonds are issued by state and local governments. While most instruments are standard fixed- or floating-rate securities, some may have more complex coupon or embedded option features.

Valuation: corporate and municipal bonds are generally valued using prices obtained directly from the market for the security, or similar securities, adjusted for seniority, maturity and liquidity. When prices are not available, instruments are valued using discounted cash flow valuation techniques incorporating the credit spread of the issuer or similar issuers. For convertible bonds where no directly comparable price is available, issuances may be priced using a convertible bond model.

Fair value hierarchy: corporate and municipal bonds are generally classified as Level 1 or Level 2 depending on the depth of trading activity behind price sources. Level 3 instruments have no suitable pricing information available and also cannot be referenced to other securities issued by the same issuer. Therefore, such instruments are measured based on price levels for similar issuers adjusted for relative tenor and issuer quality.

## Note 22 Fair value measurement (continued)

### Traded loans and loans designated at fair value

Product description: these instruments include fixed-rate loans, corporate loans, recently originated commercial real estate loans and contingent lending transactions.

Valuation: loans are valued directly using market prices that reflect recent transactions or quoted dealer prices where available. Where no market price data is available, loans are valued using relative value benchmarking using pricing derived from debt instruments in comparable entities or different products in the same entity, or by using a credit default swap valuation technique, which requires inputs for credit spreads, credit recovery rates and interest rates. Recently originated commercial real estate loans are measured using a securitization approach based on rating agency guidelines. The valuation of the contingent lending transactions is dependent on actuarial mortality levels and actuarial life insurance policy lapse rates. Mortality and lapse rate assumptions are based on external actuarial estimations for large homogeneous pools, and contingencies are derived from a range relative to the actuarially expected amount.

Fair value hierarchy: instruments with suitably deep and liquid pricing information are classified as Level 2, while any positions requiring the use of valuation techniques, or for which the price sources have insufficient trading depth, are classified as Level 3.

### Investment fund units

Product description: investment fund units are pools of assets, generally equity instruments and bonds, broken down to redeemable units.

Valuation: investment fund units are predominantly exchange-traded, with readily available quoted prices in liquid markets. Where market prices are not available, fair value may be measured using net asset values (NAV), taking into account any restrictions imposed upon redemption.

Fair value hierarchy: listed units are classified as Level 1, provided there is sufficient trading activity to justify active-market classification, while other positions are classified as Level 2. Positions for which NAV is not available or that are not redeemable at the measurement date or shortly thereafter are classified as Level 3.

### Asset-backed securities (ABS)

Product description: ABS include residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), other asset-backed securities (ABS) and collateralized debt obligations (CDO) and are instruments generally issued through the process of securitization of underlying interest-bearing assets.

Valuation: for liquid securities, the valuation process will use trade and price data, updated for movements in market levels between the time of trading and the time of valuation. Less liquid instruments are measured using discounted expected cash

flows incorporating price data for instruments or indices with similar risk profiles. Inputs to discounted expected cash flow techniques include asset prepayment rates, discount margin or discount yields, asset default rates and asset loss on default severity.

Fair value hierarchy: RMBS, CMBS and ABS are generally classified as Level 2. However, if significant inputs are unobservable, or if market or fundamental data is not available, they are classified as Level 3.

### Equity instruments

Product description: equity instruments include stocks and shares, private equity positions and units held in hedge funds.

Valuation: listed equity instruments are generally valued using prices obtained directly from the market. Unlisted equity holdings, including private equity positions, are initially marked at their transaction price and are revalued when reliable evidence of price movement becomes available or when the position is deemed to be impaired. Fair value for units held in hedge funds is measured based on their published NAV, taking into account any restrictions imposed upon redemption.

Fair value hierarchy: the majority of equity securities are actively traded on public stock exchanges where quoted prices are readily and regularly available, resulting in Level 1 classification. Units held in hedge funds are classified as Level 2, except for positions for which published NAV is not available or that are not redeemable at the measurement date or shortly thereafter, in which case such positions are classified as Level 3.

### Financial assets for unit-linked investment contracts

Product description: unit-linked investment contracts allow investors to invest in a pool of assets through issued investment units.

Valuation: the majority of assets are listed on exchanges and fair values are determined using quoted prices.

Fair value hierarchy: most assets are classified as Level 1 if actively traded, or Level 2 if trading is not active. However, instruments for which prices are not readily available are classified as Level 3.

### Structured (reverse) repurchase agreements

Product description: structured (reverse) repurchase agreements are securities purchased under resale agreements and securities sold under repurchase agreements.

Valuation: these instruments are valued using discounted expected cash flow techniques. The discount rate applied is based on funding curves that are specific to the collateral eligibility terms for the contract in question.

Fair value hierarchy: collateral terms for these positions are often not standard and therefore funding spread levels used for valuation purposes cannot be observed in the market. As a result, these positions are classified as Level 2 and Level 3.

## Note 22 Fair value measurement (continued)

### Financial liabilities designated at fair value

Product description: debt instruments, primarily comprised of equity-, rates- and credit-linked issued notes, which are held at fair value under the fair value option. These instruments are tailored specifically to the holder's risk or investment appetite with structured coupons or payoffs.

Valuation: the risk management and the valuation approaches for these instruments are closely aligned with the equivalent derivatives business and the underlying risk, and the valuation techniques used for this component are the same as the relevant valuation techniques described below. For example, equity-linked notes should be referenced to equity / index contracts and credit-linked notes should be referenced to credit derivative contracts.

Fair value hierarchy: observability is closely aligned with the equivalent derivatives business and the underlying risk.

- Refer to Note 18 for more information on financial liabilities designated at fair value
- Refer to Note 22d for more information on own credit adjustments related to financial liabilities designated at fair value

### Amounts due under unit-linked investment contracts

Product description: the financial liability represents the amounts due to unit holders.

Valuation: the fair values of investment contract liabilities are determined by reference to the fair value of the corresponding assets.

Fair value hierarchy: the liabilities themselves are not actively traded, but are mainly referenced to instruments that are actively traded and are therefore classified as Level 2.

### Derivative instruments: product description, valuation and classification in the fair value hierarchy

The curves used for discounting expected cash flows in the valuation of collateralized derivatives reflect the funding terms associated with the relevant collateral arrangement for the instrument being valued. These collateral arrangements differ across counterparties with respect to the eligible currency and interest terms of the collateral. The majority of collateralized derivatives are measured using a discount curve that is based on funding rates derived from overnight interest in the cheapest eligible currency for the respective counterparty collateral agreement.

Uncollateralized and partially collateralized derivatives are discounted using the LIBOR (or equivalent) curve for the currency of the instrument. As described in Note 22d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by CVA, DVA and FVA as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS's own credit risk and funding costs and benefits.

### Interest rate contracts

Product description: interest rate swap contracts include interest rate swaps, basis swaps, cross-currency swaps, inflation swaps and interest rate forwards, often referred to as forward-rate agreements (FRA). Interest rate option contracts include caps and floors, swaptions, swaps with complex payoff profiles and other more complex interest rate options.

Valuation: interest rate swap contracts are valued by estimating future interest cash flows and discounting those cash flows using a rate that reflects the appropriate funding rate for the position being measured. The yield curves used to estimate future index levels and discount rates are generated using market standard yield curve models using interest rates associated with current market activity. The key inputs to the models are interest rate swap rates, FRA rates, short-term interest rate futures prices, basis swap spreads and inflation swap rates. Interest rate option contracts are valued using various market standard option models, using inputs that include interest rate yield curves, inflation curves, volatilities and correlations. The volatility and correlation inputs within the models are implied from market data based on market-observed prices for standard option instruments trading within the market. Option models used to value more exotic products have a number of model parameter inputs that require calibration to enable the exotic model to price standard option instruments to the price levels observed in the market. When the maturity of the interest rate swap or option contract exceeds the term for which standard market quotes are observable for a significant input parameter, the contracts are valued by extrapolation from the last observable point using standard assumptions or by reference to another observable comparable input parameter to represent a suitable proxy for that portion of the term.

Fair value hierarchy: the majority of interest rate swaps are classified as Level 2 as the standard market contracts that form the inputs for yield curve models are generally traded in active and observable markets. Options are generally treated as Level 2 as the calibration process enables the model output to be validated to active-market levels. Models calibrated in this way are then used to revalue the portfolio of both standard options as well as more exotic products. In most cases, there are active and observable markets for the standard market instruments that form the inputs for yield curve models as well as the financial instruments from which volatility and correlation inputs are derived. Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3. Interest rate swap or option contracts are classified as Level 3 when the term exceeds standard market observable quotes.

## Note 22 Fair value measurement (continued)

### Credit derivative contracts

Product description: a credit derivative is a financial instrument that transfers credit risk related to a single underlying entity, a portfolio of underlying entities or a pool of securitized referenced assets. Credit derivative products include credit default swaps (CDS) on single names, indices, bespoke portfolios and securitized products, plus first to default swaps and certain total return swaps (TRS).

Valuation: credit derivative contracts are valued using industry standard models based primarily on market credit spreads, upfront pricing points and implied recovery rates. Where a derivative credit spread is not directly available, it may be derived from the price of the reference cash bond. Correlation is an additional input for certain portfolio credit derivatives. Asset-backed credit derivatives are valued using a similar valuation technique to the underlying security with an adjustment to reflect the funding differences between cash and synthetic form. Inputs include prepayment rates, default rates, loss severity, discount margin / rate.

Fair value hierarchy classification: single entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads, recovery rates and correlations are determined from actively traded observable market data. Where the underlying reference name(s) are not actively traded and the correlation cannot be directly mapped to actively traded tranche instruments, these contracts are classified as Level 3. Asset-backed credit derivatives follow the characteristics of the underlying security and are therefore distributed across Level 2 and Level 3.

### Foreign exchange contracts

Product description: this includes open spot and forward foreign exchange (FX) contracts and OTC FX option contracts. OTC FX option contracts include standard call and put options, options with multiple exercise dates, path-dependent options, options with averaging features, options with discontinuous payoff characteristics, options on a number of underlying FX rates and multi-dimensional FX option contracts, which have a dependency on multiple FX pairs.

Valuation: open spot FX contracts are valued using the FX spot rate observed in the market. Forward FX contracts are valued using the FX spot rate adjusted for forward pricing points observed from standard market-based sources. OTC FX option contracts are valued using market standard option valuation models. The models used for shorter-dated options (i.e., maturities of five years or less) tend to be different than those used for longer-dated options because the models needed for longer-dated OTC FX contracts require additional consideration of interest rate and FX rate interdependency. Inputs to the option valuation models include spot FX rates, FX forward

points, FX volatilities, interest rate yield curves, interest rate volatilities and correlations. The inputs for volatility and correlation are implied through the calibration of observed prices for standard option contracts trading within the market. The valuation for multi-dimensional FX options uses a multi-local volatility model, which is calibrated to the observed FX volatilities for all relevant FX pairs.

Fair value hierarchy: the markets for both FX spot and FX forward pricing points are both actively traded and observable and therefore such FX contracts are generally classified as Level 2. A significant proportion of OTC FX option contracts are classified as Level 2 as inputs are derived mostly from standard market contracts traded in active and observable markets. OTC FX option contracts classified as Level 3 include multi-dimensional FX options and long-dated FX exotic option contracts where there is no active market from which to derive volatility or correlation inputs. The inputs used to value these OTC FX option contracts are calculated using consensus pricing services without an underlying principal market, historical asset prices or by extrapolation.

### Equity / index contracts

Product description: equity / index contracts are equity forward contracts and equity option contracts. Equity option contracts include market standard single or basket stock or index call and put options as well as equity option contracts with more complex features.

Valuation: equity forward contracts have a single stock or index underlying and are valued using market standard models. The key inputs to the models are stock prices, estimated dividend rates and equity funding rates (which are implied from prices of forward contracts observed in the market). Estimated cash flows are then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When no market data is available for the instrument maturity, they are valued by extrapolation of available data, use of historical dividend data, or use of data for a related equity. Equity option contracts are valued using market standard models that estimate the equity forward level as described for equity forward contracts and incorporate inputs for stock volatility and for correlation between stocks within a basket. The probability-weighted expected option payoff generated is then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When volatility, forward or correlation inputs are not available, they are valued using extrapolation of available data, historical dividend, correlation or volatility data, or the equivalent data for a related equity.



## Note 22 Fair value measurement (continued)

Fair value hierarchy: as inputs are derived mostly from standard market contracts traded in active and observable markets, a significant proportion of equity forward contracts are classified as Level 2. Equity option positions for which inputs are derived from standard market contracts traded in active and observable markets are also classified as Level 2. Level 3 positions are those for which volatility, forward or correlation inputs are not observable.

### Commodity contracts

Product description: commodity derivative contracts include forward, swap and option contracts on individual commodities and on commodity indices.

Valuation: commodity forward and swap contracts are measured using market standard models that use market

forward levels on standard instruments. Commodity option contracts are measured using market standard option models that estimate the commodity forward level as described for commodity forward and swap contracts, incorporating inputs for the volatility of the underlying index or commodity. For commodity options on baskets of commodities or bespoke commodity indices, the valuation technique also incorporates inputs for the correlation between different commodities or commodity indices.

Fair value hierarchy: individual commodity contracts are typically classified as Level 2 because active forward and volatility market data is available.

→ Refer to Note 12 for more information on derivative instruments

### d) Valuation adjustments

The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. As a result, valuations are adjusted, where appropriate and when such factors would be considered by market participants in estimating fair value, to reflect close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors. Valuation adjustments are an important component of fair value for assets and liabilities that are measured using valuation techniques. Such adjustments are applied to reflect uncertainties within the fair value measurement process, to adjust for an identified model simplification or to incorporate an aspect of fair value that requires an overall portfolio assessment rather than an evaluation based on an individual instrument level characteristic.

### Day-1 reserves

For new transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially

recognized at the transaction price. The transaction price may differ from the fair value obtained using a valuation technique, where any such difference is deferred and not initially recognized in the income statement. These day-1 profit or loss reserves are reflected, where appropriate, as valuation adjustments.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss related to financial instruments other than financial assets available for sale is released into *Net trading income* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss related to financial assets available for sale is released into *Other comprehensive income* when pricing of equivalent products or the underlying parameters become observable and is released into *Other income* when the assets are sold.

### Deferred day-1 profit or loss

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Balance at the beginning of the year</b>	<b>371</b>	421	480
Profit / (loss) deferred on new transactions	242	254	268
(Profit) / loss recognized in the income statement	(274)	(290)	(321)
(Profit) / loss recognized in other comprehensive income		(23)	
Foreign currency translation	(10)	9	(6)
<b>Balance at the end of the year</b>	<b>329</b>	371	421

## Note 22 Fair value measurement (continued)

### Own credit

In addition to considering the valuation of the derivative risk component, the valuation of financial liabilities designated at fair value also requires consideration of the funded component and specifically the own credit component of fair value. Own credit risk is reflected in the valuation of UBS's fair value option liabilities where this component is considered relevant for valuation purposes by UBS's counterparties and other market participants. However, own credit risk is not reflected in the valuation of UBS's liabilities that are fully collateralized or for other obligations for which it is established market practice not to include an own credit component.

The own credit presentation requirements of IFRS 9, *Financial Instruments*, were adopted as of 1 January 2016. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit have been recognized in *Other comprehensive income* directly within *Retained earnings*. As UBS AG does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own

credit recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Comparative period information was not restated.

Own credit is estimated using an own credit adjustment (OCA) curve, which incorporates observable market data, including market-observed secondary prices for UBS senior debt, UBS credit default swap (CDS) spreads and senior debt curves of peers. The table below summarizes the effects of own credit adjustments related to financial liabilities designated at fair value. The change in unrealized own credit for the period ended consists of changes in fair value that are attributable to the change in UBS's credit spreads, as well as the effect of changes in fair values attributable to factors other than credit spreads, such as redemptions, effects from time decay and changes in interest and other market rates. Realized own credit is recognized when an instrument with an associated unrealized own credit adjustment is repurchased prior to the contractual maturity date. Life-to-date amounts reflect the cumulative unrealized change since initial recognition.

→ Refer to Note 18 for more information on financial liabilities designated at fair value

### Own credit adjustments on financial liabilities designated at fair value

	For the year ended		
	Included in Other comprehensive income	31.12.16	Included in Net trading income 31.12.15
<i>CHF million</i>	<b>31.12.17</b>		
<b>Recognized during the year:</b>			
Realized gain / (loss)	<b>21</b>	18	
Unrealized gain / (loss)	<b>(333)</b>	(138)	553
Total gain / (loss), before tax	<b>(312)</b>	(120)	
		As of	
<i>CHF million</i>	<b>31.12.17</b>	31.12.16	31.12.15
<b>Recognized on the balance sheet as of the end of the year:</b>			
Unrealized life-to-date gain / (loss)	<b>(195)</b>	141	287

## Note 22 Fair value measurement (continued)

### Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments that are classified as *Financial assets designated at fair value*, credit valuation adjustments (CVA) are necessary to reflect the credit risk of the counterparty inherent in these instruments. This amount represents the estimated fair value of protection required to hedge the counterparty credit risk of such instruments. A CVA is determined for each counterparty, considering all exposures to that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses and other contractual factors.

### Funding valuation adjustments

Funding valuation adjustments (FVA) reflect the costs and benefits of funding associated with uncollateralized and partially collateralized derivative receivables and payables and are calculated as the valuation effect from moving the discounting of the uncollateralized derivative cash flows from LIBOR to OCA using the CVA framework.

An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or repledged.

### Debit valuation adjustments

A debit valuation adjustment (DVA) is estimated to incorporate own credit in the valuation of derivatives, effectively consistent with the CVA framework. DVA is determined for each

counterparty, considering all exposures with that counterparty and taking into account collateral netting agreements, expected future mark-to-market movements and UBS's credit default spreads.

### Other valuation adjustments

Instruments that are measured as part of a portfolio of combined long and short positions are valued at mid-market levels to ensure consistent valuation of the long- and short-component risks. A liquidity valuation adjustment is then made to the overall net long or short exposure to move the fair value to bid or offer as appropriate, reflecting current levels of market liquidity. The bid-offer spreads used in the calculation of this valuation adjustment are obtained from market transactions and other relevant sources and are updated periodically.

Uncertainties associated with the use of model-based valuations are incorporated into the measurement of fair value through the use of model reserves. These reserves reflect the amounts that UBS AG estimates should be deducted from valuations produced directly by models to incorporate uncertainties in the relevant modeling assumptions, in the model and market inputs used, or in the calibration of the model output to adjust for known model deficiencies. In arriving at these estimates, UBS AG considers a range of market practices, including how it believes market participants would assess these uncertainties. Model reserves are reassessed periodically in light of data from market transactions, consensus pricing services and other relevant sources.

### Valuation adjustments on financial instruments

	As of	
<i>Life-to-date gain / (loss), CHF million</i>	<b>31.12.17</b>	31.12.16
<b>Credit valuation adjustments<sup>1</sup></b>	<b>(113)</b>	(216)
<b>Funding valuation adjustments</b>	<b>(49)</b>	(106)
<b>Debit valuation adjustments</b>	<b>2</b>	5
<b>Other valuation adjustments</b>	<b>(715)</b>	(713)
<i>of which: liquidity</i>	<b>(465)</b>	(439)
<i>of which: model uncertainty</i>	<b>(250)</b>	(274)

<sup>1</sup> Amounts do not include reserves against defaulted counterparties.

### e) Transfers between Level 1 and Level 2

The amounts provided below reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets totaling approximately CHF 0.8 billion, which were mainly comprised of financial assets designated at fair value, largely corporate and municipal bonds, and financial assets held for trading, predominantly investment fund units as well as corporate and municipal bonds, were transferred from Level 2 to Level 1 during 2017, generally due to increased levels of trading activity observed within the market. Transfers of financial

liabilities from Level 2 to Level 1 during 2017 were not significant.

Assets totaling approximately CHF 0.3 billion, which were mainly comprised of financial assets available for sale, largely government bonds, and financial assets held for trading, predominantly investment fund units and equity instruments, were transferred from Level 1 to Level 2 during 2017, generally due to diminished levels of trading activity observed within the market. Transfers of financial liabilities from Level 1 to Level 2 during 2017 were not significant.

## Note 22 Fair value measurement (continued)

### f) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities together with the valuation techniques used to measure fair value, the significant inputs used in the valuation technique that are considered unobservable and a range of values for those unobservable inputs. Several inputs disclosed in prior periods are not disclosed in the table below because they are not considered significant to the respective valuation technique as of 31 December 2017.

The range of values represents the highest- and lowest-level input used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input, but rather the different underlying characteristics of the relevant assets and liabilities. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Further, the ranges of unobservable inputs may differ across other financial institutions due to the diversity of the products in each firm's inventory.

#### Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) <sup>1</sup>	Range of inputs						
	Assets		Liabilities				31.12.17			31.12.16			unit <sup>1</sup>
	31.12.17	31.12.16	31.12.17	31.12.16			low	high	weighted average <sup>2</sup>	low	high	weighted average <sup>2</sup>	
<b>Financial assets held for trading / Trading portfolio liabilities, Financial assets / liabilities designated at fair value and Financial assets available for sale</b>													
<i>Corporate and municipal bonds</i>	0.6	0.6	0.0	0.0	Relative value to market comparable	Bond price equivalent	0	133	92	0	128	88	points
<i>Traded loans, loans designated at fair value, loan commitments and guarantees</i>	1.7	2.0	0.0	0.0	Relative value to market comparable	Loan price equivalent	50	102	98	39	103	94	points
					Discounted expected cash flows	Credit spread	23	124		71	554		basis points
					Market comparable and securitization model	Discount margin	0	14	2	0	16	2	%
<i>Investment fund units<sup>3</sup></i>	0.7	0.2	0.0	0.0	Relative value to market comparable	Net asset value							
<i>Equity instruments<sup>3</sup></i>	0.5	0.4	0.1	0.1	Relative value to market comparable	Price							
<i>Structured (reverse) repurchase agreements</i>	0.2	0.6	0.0	0.3	Discounted expected cash flows	Funding spread	15	195		15	195		basis points
<i>Issued and over-the-counter debt instruments<sup>4</sup></i>			12.8	10.7									
<b>Replacement values</b>													
<i>Interest rate contracts</i>	0.1	0.3	0.2	0.5	Option model	Volatility of interest rates	26	229		26	176		%
<i>Credit derivative contracts</i>	0.5	1.3	0.6	1.5	Discounted expected cash flows	Credit spreads	6	550		0	791		basis points
						Bond price equivalent	2	102		3	100		points
<i>Equity / index contracts</i>	0.7	0.7	1.9	1.9	Option model	Equity dividend yields	0	13		0	15		%
						Volatility of equity stocks, equity and other indices	0	172		0	150		%
						Equity-to-FX correlation	(39)	70		(45)	82		%
						Equity-to-equity correlation	(50)	97		12	98		%

<sup>1</sup> The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par (e.g., 100 points would be 100% of par). <sup>2</sup> Weighted averages are provided for non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to derivative contracts as this would not be meaningful. <sup>3</sup> The range of inputs is not disclosed due to the dispersion of values given the diverse nature of the investments. <sup>4</sup> Valuation techniques, significant unobservable inputs and the respective input ranges for issued debt instruments and over-the-counter debt instruments are the same as the equivalent derivative or structured financing instruments presented elsewhere in this table.

## Note 22 Fair value measurement (continued)

### Significant unobservable inputs in Level 3 positions

This section discusses the significant unobservable inputs used in the valuation of Level 3 instruments and assesses the potential effect that a change in each unobservable input in isolation may have on a fair value measurement, including information to facilitate an understanding of factors that give rise to the input ranges shown. Relationships between observable and unobservable inputs have not been included in the summary below.

#### Bond price equivalent

Where market prices are not available for a bond, fair value is measured by comparison with observable pricing data from similar instruments. Factors considered when selecting comparable instruments include credit quality, maturity and industry of the issuer. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield (either as an outright yield or as a spread to LIBOR). Bond prices are expressed as points of the nominal, where 100 represents a fair value equal to the nominal value (i.e., par).

For corporate and municipal bonds, the range represents the range of prices from reference issuances used in determining fair value. Bonds priced at 0 are distressed to the point that no recovery is expected, while prices significantly in excess of 100 or par relate to inflation-linked or structured issuances that pay a coupon in excess of the market benchmark as of the measurement date.

For credit derivatives, the bond price range represents the range of prices used for reference instruments that are typically converted to an equivalent yield or credit spread as part of the valuation process.

#### Loan price equivalent

Where market prices are not available for a traded loan, fair value is measured by comparison with observable pricing data for similar instruments. Factors considered when selecting comparable instruments include industry segment, collateral quality, maturity and issuer-specific covenants. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield. The range represents the range of prices derived from reference issuances of a similar credit quality used in measuring fair value for loans classified as Level 3. Loans priced at 0 are distressed to the point that no recovery is expected, while a current price of 100 represents a loan that is expected to be repaid in full.

#### Credit spread

Valuation models for many credit derivatives require an input for the credit spread, which is a reflection of the credit quality of the associated referenced underlying. The credit spread of a particular security is quoted in relation to the yield on a benchmark security or reference rate, typically either US Treasury or LIBOR, and is generally expressed in terms of basis points. An increase / (decrease) in credit spread will increase / (decrease) the value of credit protection offered by CDS and other credit derivative products. The income statement effect from such changes depends on the nature and direction of the positions held. Credit spreads may be negative where the asset is more creditworthy than the benchmark against which the spread is calculated. A wider credit spread represents decreasing creditworthiness. The range represents a diverse set of underlyings, with the lower end of the range representing credits of the highest quality (e.g., approximating the risk of LIBOR) and the upper end of the range representing greater levels of credit risk.

#### Discount margin (DM)

The DM spread represents the discount rates used to present value cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. DM spreads are a rate or rates applied on top of a floating index (e.g., LIBOR) to discount expected cash flows. Generally, a decrease / (increase) in the DM in isolation would result in a higher / (lower) fair value.

The high end of the range relates to securities that are priced low within the market relative to the expected cash flow schedule. This indicates that the market is pricing an increased risk of credit loss into the security that is greater than what is being captured by the expected cash flow generation process. The low ends of the ranges are typical of funding rates on better-quality instruments.

#### Funding spread

Structured financing transactions are valued using synthetic funding curves that best represent the assets that are pledged as collateral for the transactions. They are not representative of where UBS can fund itself on an unsecured basis, but provide an estimate of where UBS can source and deploy secured funding with counterparties for a given type of collateral. The funding spreads are expressed in terms of basis points over or under LIBOR, and if funding spreads widen, this increases the effect of discounting.

A small proportion of structured debt instruments and non-structured fixed-rate bonds within financial liabilities designated at fair value had an exposure to funding spreads that was longer in duration than the actively traded market.

## Note 22 Fair value measurement (continued)

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### Volatility

Volatility measures the variability of future prices for a particular instrument and is generally expressed as a percentage, where a higher number reflects a more volatile instrument for which future price movements are more likely to occur. The minimum level of volatility is 0% and there is no theoretical maximum. Volatility is a key input into option models, where it is used to derive a probability-based distribution of future prices for the underlying instrument. The effect of volatility on individual positions within the portfolio is driven primarily by whether the option contract is a long or short position. In most cases, the fair value of an option increases as a result of an increase in volatility and is reduced by a decrease in volatility. Generally, volatility used in the measurement of fair value is derived from active-market option prices (referred to as implied volatility). A key feature of implied volatility is the volatility "smile" or "skew," which represents the effect of pricing options of different option strikes at different implied volatility levels.

The volatility of interest rates reflects the range of unobservable volatilities across different currencies and related underlying interest rate levels. Volatilities of low interest rates tend to be much higher than volatilities of high interest rates. In addition, different currencies may have significantly different implied volatilities. The volatility of equity stocks, equity and other indices reflects the range of underlying stock volatilities.

### Correlation

Correlation measures the inter relationship between the movements of two variables. It is expressed as a percentage between -100% and +100%, where +100% represents perfectly correlated variables (meaning a movement of one variable is associated with a movement of the other variable in

the same direction), and -100% implies the variables are inversely correlated (meaning a movement of one variable is associated with a movement of the other variable in the opposite direction). The effect of correlation on the measurement of fair value depends on the specific terms of the instruments being valued, due to the range of different payoff features within such instruments.

Equity-to-FX correlation is important for equity options based on a currency different than the currency of the underlying stock. Equity-to-equity correlation is particularly important for complex options that incorporate, in some manner, different equities in the projected payoff. The closer the correlation is to 100%, the more related one equity is to another. For example, equities with a very high correlation could be from different parts of the same corporate structure.

### Equity dividend yields

The derivation of a forward price for an individual stock or index is important for measuring fair value for forward or swap contracts and for measuring fair value using option pricing models. The relationship between the current stock price and the forward price is based on a combination of expected future dividend levels and payment timings, and, to a lesser extent, the relevant funding rates applicable to the stock in question. Dividend yields are generally expressed as an annualized percentage of the share price with the lowest limit of 0% representing a stock that is not expected to pay any dividend. The dividend yield and timing represents the most significant parameter in determining fair value for instruments that are sensitive to an equity forward price.

## g) Level 3 instruments: sensitivity to changes in unobservable input assumptions

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The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, and the estimated effect thereof.

The table shown presents the favorable and unfavorable effects for each class of financial assets and liabilities for which the potential change in fair value is considered significant. The sensitivity data presented represent an estimation of valuation uncertainty based on reasonably possible alternative values for Level 3 inputs at the balance sheet date and do not represent the estimated effect of stress scenarios. Typically, these financial assets and liabilities are sensitive to a combination of inputs from Levels 1–3. Although well-defined interdependencies may exist

between Levels 1–2 and Level 3 parameters (e.g., between interest rates, which are generally Level 1 or Level 2, and prepayments, which are generally Level 3), these have not been incorporated in the table. Further, direct inter relationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data are estimated using a number of techniques, including the estimation of price dispersion among different market participants, variation in modeling approaches and reasonably possible changes to assumptions used within the fair value measurement process. The sensitivity ranges are not always symmetrical around the fair values as the inputs used in valuations are not always precisely in the middle of the favorable and unfavorable range.

## Note 22 Fair value measurement (continued)

Sensitivity data are determined at a product or parameter level and then aggregated assuming no diversification benefit. The calculated sensitivity is applied to both the outright position and any related Level 3 hedge. The main interdependencies across different Level 3 products to a single unobservable input parameter have been included in the basis of netting exposures within the calculation. Aggregation without allowing for diversification involves the simple summation of individual results with the total sensitivity, therefore representing the effect of all

unobservable inputs that, if moved to a reasonably possible favorable or unfavorable level at the same time, would result in a significant change in the valuation. Diversification would incorporate estimated correlations across different sensitivity results and, as such, would result in an overall sensitivity that would be less than the sum of the individual component sensitivities. UBS AG believes that, while there are diversification benefits within the portfolios representing these sensitivity numbers, they are not significant to this analysis.

### Sensitivity of fair value measurements to changes in unobservable input assumptions<sup>1</sup>

CHF million	31.12.17		31.12.16	
	Favorable changes <sup>2</sup>	Unfavorable changes <sup>2</sup>	Favorable changes <sup>2</sup>	Unfavorable changes <sup>2</sup>
Traded loans, loans designated at fair value, loan commitments and guarantees	79	(11)	80	(8)
Asset-backed securities	19	(15)	23	(29)
Equity instruments	79	(53)	85	(66)
Interest rate derivative contracts, net	13	(26)	30	(30)
Credit derivative contracts, net	64	(99)	128	(174)
Foreign exchange derivative contracts, net	12	(6)	18	(9)
Equity / index derivative contracts, net	190	(193)	142	(143)
Structured (reverse) repurchase agreements	34	(34)	43	(46)
Other	13	(13)	12	(12)
<b>Total</b>	<b>502</b>	<b>(450)</b>	<b>560</b>	<b>(517)</b>

<sup>1</sup> Effective 31 December 2017, the sensitivity of issued and over-the-counter debt instruments is reported with the equivalent derivative or structured financing instrument. Prior-period information has been restated to reflect this change in presentation. <sup>2</sup> Of the total favorable changes, CHF 78 million as of 31 December 2017 (31 December 2016: CHF 75 million) related to financial assets available for sale. Of the total unfavorable changes, CHF 51 million as of 31 December 2017 (31 December 2016: CHF 55 million) related to financial assets available for sale.

### h) Level 3 instruments: movements during the period

#### Significant changes in Level 3 instruments

The table on the following pages presents additional information about Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy and, as a result, realized and unrealized gains and losses included in the table may not include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented within the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters.

Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

Assets transferred into and out of Level 3 totaled CHF 1.4 billion and CHF 1.1 billion, respectively. Transfers into Level 3 were primarily comprised of investment fund units and equity /

index contracts, due to decreased observability of the respective net asset value and equity volatility inputs. Transfers out of Level 3 were primarily comprised of credit derivative and equity / index contracts, reflecting increased observability of the respective credit spread and equity volatility inputs.

Liabilities transferred into and out of Level 3 totaled CHF 1.8 billion and CHF 3.2 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments and equity / index contracts, due to decreased observability of the respective equity volatility inputs used to determine the fair value of the options embedded in these structures. Transfers out of Level 3 were primarily comprised of equity-linked issued debt instruments and credit derivative contracts resulting from changes in the availability of the observable equity volatility and credit spread inputs used to determine the fair value of the options embedded in these structures.

## Note 22 Fair value measurement (continued)

### Movements of Level 3 instruments

CHF billion	Balance as of 31 December 2015	Total gains / (losses) included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation
		Net interest income, net trading income and other income	of which: related to Level 3 instruments held at the end of the reporting period								
<b>Financial assets held for trading</b>	<b>2.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.9</b>	<b>(6.8)</b>	<b>4.1</b>	<b>0.0</b>	<b>1.7</b>	<b>(0.3)</b>	<b>(0.1)</b>	
<i>of which:</i>											
<i>Corporate and municipal bonds</i>	0.7	0.2	0.1	0.6	(0.8)	0.0	0.0	0.1	(0.1)	(0.1)	
<i>Loans</i>	0.8	(0.1)	(0.1)	0.1	(5.2)	4.1	0.0	1.1	(0.2)	0.0	
<i>Other</i>	0.6	0.0	0.0	0.2	(0.8)	0.0	0.0	0.5	0.0	0.0	
<b>Financial assets designated at fair value</b>	<b>3.3</b>	<b>(0.4)</b>	<b>(0.1)</b>	<b>0.1</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.9)</b>	<b>0.5</b>	<b>(0.1)</b>	<b>0.0</b>	
<i>of which:</i>											
<i>Loans (including structured loans)</i>	1.7	(0.4)	(0.1)	0.0	0.0	0.6	(1.0)	0.4	(0.1)	0.0	
<i>Structured reverse repurchase and securities borrowing agreements</i>	1.5	0.0	0.0	0.0	0.0	0.0	(0.9)	0.0	0.0	0.0	
<i>Other</i>	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Financial assets available for sale</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.0</b>	
<b>Positive replacement values</b>	<b>2.9</b>	<b>(0.4)</b>	<b>(0.5)</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>(1.9)</b>	<b>1.3</b>	<b>(0.4)</b>	<b>0.0</b>	
<i>of which:</i>											
<i>Credit derivative contracts</i>	1.3	(0.2)	(0.1)	0.0	0.0	0.6	(0.7)	0.4	(0.1)	0.0	
<i>Equity / index contracts</i>	1.0	(0.1)	0.0	0.0	0.0	0.4	(0.6)	0.2	(0.2)	0.0	
<i>Other</i>	0.6	(0.1)	(0.3)	0.0	0.0	0.1	(0.6)	0.7	(0.1)	0.0	
<b>Negative replacement values</b>	<b>3.3</b>	<b>0.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>1.5</b>	<b>(2.1)</b>	<b>1.2</b>	<b>(0.6)</b>	<b>0.0</b>	
<i>of which:</i>											
<i>Credit derivative contracts</i>	1.3	0.5	0.6	0.0	0.0	0.2	(0.7)	0.3	(0.1)	0.0	
<i>Equity / index contracts</i>	1.4	0.3	0.1	0.0	0.0	1.0	(0.8)	0.2	(0.3)	0.0	
<i>Other</i>	0.6	(0.2)	(0.2)	0.0	0.0	0.3	(0.6)	0.7	(0.2)	0.0	
<b>Financial liabilities designated at fair value</b>	<b>10.7</b>	<b>1.0</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>5.0</b>	<b>(3.5)</b>	<b>0.9</b>	<b>(2.9)</b>	<b>(0.1)</b>	
<i>of which:</i>											
<i>Issued debt instruments</i>	9.3	0.9	0.6	0.0	0.0	4.1	(2.5)	0.8	(2.9)	(0.1)	
<i>Over-the-counter debt instruments</i>	0.8	0.1	0.0	0.0	0.0	0.8	(0.6)	0.1	0.0	0.0	
<i>Structured repurchase agreements</i>	0.6	0.0	0.0	0.0	0.0	0.1	(0.4)	0.0	0.0	0.0	

<sup>1</sup> Total Level 3 assets as of 31 December 2017 were CHF 5.5 billion (31 December 2016: CHF 6.9 billion). Total Level 3 liabilities as of 31 December 2017 were CHF 15.7 billion (31 December 2016: CHF 15.1 billion).



Balance as of 31 December 2016	Total gains / (losses) included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 December 2017 <sup>1</sup>
	Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>									
<b>1.7</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.7</b>	<b>(3.8)</b>	<b>2.7</b>	<b>0.0</b>	<b>0.9</b>	<b>(0.2)</b>	<b>0.0</b>	<b>2.0</b>	
0.6	0.1	0.1	0.4	(0.7)	0.0	0.0	0.1	0.0	0.0	0.6	
0.7	0.0	(0.1)	0.1	(2.8)	2.7	0.0	0.0	(0.1)	0.0	0.5	
0.4	(0.1)	0.0	0.2	(0.3)	0.0	0.0	0.8	0.0	0.0	0.9	
<b>2.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>(1.2)</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>1.4</b>	
1.2	0.2	0.2	0.0	0.0	0.1	(0.6)	0.0	(0.1)	0.0	0.8	
0.6	0.0	0.0	0.0	0.0	0.1	(0.6)	0.0	0.0	0.0	0.2	
0.2	(0.1)	(0.1)	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.5	
<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>	
<b>2.5</b>	<b>(0.3)</b>	<b>(0.4)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>(1.2)</b>	<b>0.4</b>	<b>(0.8)</b>	<b>0.0</b>	<b>1.5</b>	
1.3	(0.2)	(0.2)	0.0	0.0	0.0	(0.3)	0.0	(0.4)	0.0	0.5	
0.7	(0.1)	(0.1)	0.0	0.0	0.9	(0.7)	0.3	(0.4)	0.0	0.7	
0.5	0.0	(0.1)	0.0	0.0	0.0	(0.2)	0.1	(0.1)	0.0	0.3	
<b>4.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.4)</b>	<b>0.5</b>	<b>(1.3)</b>	<b>0.1</b>	<b>2.8</b>	
1.5	0.0	(0.2)	0.0	0.0	0.1	(0.4)	0.2	(0.8)	0.0	0.6	
1.9	0.3	0.2	0.0	0.0	0.6	(0.6)	0.2	(0.5)	0.0	1.9	
0.6	0.0	0.0	0.0	0.0	0.0	(0.4)	0.1	(0.1)	0.0	0.3	
<b>11.0</b>	<b>1.4</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>6.7</b>	<b>(5.7)</b>	<b>1.3</b>	<b>(1.8)</b>	<b>(0.1)</b>	<b>12.8</b>	
9.7	1.4	0.9	0.0	0.0	5.2	(4.9)	1.2	(1.6)	(0.1)	10.9	
1.1	0.0	0.0	0.0	0.0	1.5	(0.7)	0.1	0.0	0.0	1.9	
0.3	0.0	0.0	0.0	0.0	0.0	(0.1)	0.0	(0.2)	0.0	0.0	

## Note 22 Fair value measurement (continued)

### i) Financial instruments not measured at fair value

The table below provides the estimated fair values of financial instruments not measured at fair value.

#### Financial instruments not measured at fair value

CHF billion	31.12.17					31.12.16				
	Carrying value	Fair value				Carrying value	Fair value			
		Total	Total	Level 1	Level 2		Level 3	Total	Total	Level 1
<b>Assets</b>										
Cash and balances with central banks	87.8	87.8	87.8	0.0	0.0	107.8	107.8	107.8	0.0	0.0
Due from banks	13.7	13.7	13.1	0.6	0.0	13.1	13.1	12.5	0.7	0.0
Cash collateral on securities borrowed	12.4	12.4	0.0	12.4	0.0	15.1	15.1	0.0	15.1	0.0
Reverse repurchase agreements	77.2	77.2	0.0	74.8	2.5	66.2	66.2	0.0	62.5	3.7
Cash collateral receivables on derivative instruments	23.4	23.4	0.0	23.4	0.0	26.7	26.7	0.0	26.7	0.0
Loans	321.7	323.1	0.0	178.9	144.3	307.0	310.4	0.0	170.0	140.4
Financial assets held to maturity	9.2	9.0	6.3	2.7	0.0	9.3	9.1	6.3	2.8	0.0
Other assets	28.0	28.0	0.0	28.0	0.0	18.5	18.5	0.0	18.5	0.0
<b>Liabilities</b>										
Due to banks	7.5	7.5	6.5	1.1	0.0	10.6	10.6	8.8	1.9	0.0
Cash collateral on securities lent	1.8	1.8	0.0	1.8	0.0	2.8	2.8	0.0	2.8	0.0
Repurchase agreements	15.3	15.3	0.0	15.3	0.0	6.6	6.6	0.0	6.6	0.0
Cash collateral payables on derivative instruments	30.2	30.2	0.0	30.2	0.0	35.5	35.5	0.0	35.5	0.0
Due to customers	447.1	448.8	0.0	448.8	0.0	450.2	450.6	0.0	450.6	0.0
Debt issued	104.8	107.0	0.0	102.7	4.3	79.0	81.1	0.0	78.5	2.6
Other liabilities	37.1	37.1	0.0	37.1	0.0	39.0	39.0	0.0	39.0	0.0

The fair values included in the table above were calculated for disclosure purposes only. The valuation techniques and assumptions described below relate only to the fair value of UBS's financial instruments not measured at fair value. Other institutions may use different methods and assumptions for their fair value estimation, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another. The following principles were applied when determining fair value estimates for financial instruments not measured at fair value:

- For financial instruments with remaining maturities greater than three months, the fair value was determined from quoted market prices, if available.
- Where quoted market prices were not available, the fair values were estimated by discounting contractual cash flows using current market interest rates or appropriate yield curves for instruments with similar credit risk and maturity. These estimates generally include adjustments for counterparty credit risk or UBS's own credit.
- For short-term financial instruments with remaining maturities of three months or less, the carrying amount, which is net of

credit loss allowances, is generally considered a reasonable estimate of fair value. The following financial instruments not measured at fair value had remaining maturities of three months or less as of 31 December 2017: 100% of cash and balances with central banks, 95% of amounts due from banks, 100% of cash collateral on securities borrowed, 81% of reverse repurchase agreements, 100% of cash collateral receivables on derivative instruments, 51% of loans, 0% of financial assets held to maturity, 86% of amounts due to banks, 100% of cash collateral on securities lent, 96% of repurchase agreements, 100% of cash collateral payables on derivative instruments, 99% of amounts due to customers and 13% of debt issued.

- The fair value estimates for repurchase and reverse repurchase agreements with variable and fixed interest rates, for all maturities, include the valuation of the interest rate component of these instruments. Credit and debit valuation adjustments have not been included in the valuation due to the short-term nature of these instruments.

## Note 23 Restricted and transferred financial assets

This Note provides information on restricted financial assets (Note 23a), transfers of financial assets (Note 23b and 23c) and financial assets that are received as collateral with the right to resell or repledge these assets (Note 23d).

### a) Restricted financial assets

Restricted financial assets consist of assets pledged as collateral against an existing liability or contingent liability and other assets that are otherwise explicitly restricted such that they cannot be used to secure funding.

Financial assets are mainly pledged as collateral in securities lending transactions, in repurchase transactions, against loans from Swiss mortgage institutions and in connection with the issuance of covered bonds. UBS AG generally enters into repurchase and securities lending arrangements under standard market agreements. For securities lending, the cash received as collateral may be more or less than the fair value of the securities loaned, depending on the nature of the transaction. For repurchase agreements, the fair value of the collateral sold under an agreement to repurchase is generally in excess of the cash borrowed. Pledged mortgage loans serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances of CHF 12,457 million as of 31 December 2017 (31 December 2016: CHF 14,137 million).

Other restricted financial assets include assets protected under client asset segregation rules, assets held by UBS AG's insurance entities to back related liabilities to the policy holders, assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities such as certain investment funds and other structured entities. The carrying value of the liabilities associated with these other restricted financial assets is generally equal to the carrying value of the

assets, with the exception of assets held to comply with local asset maintenance requirements, for which the associated liabilities are greater.

UBS AG and its subsidiaries are, in certain cases, subject to regulatory requirements that affect the transfer of dividends and capital within UBS AG. Certain regulated subsidiaries are required to maintain capital and / or liquidity to comply with local regulations and may be subject to prudential limitations by regulators that limit the amount of funds that they can distribute or otherwise transfer. Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries. Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis, such as the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) process that affects UBS Americas Holding LLC, and may limit the ability of the entity to engage in new activities or take capital actions based on the results of those tests. Non-regulated subsidiaries are generally not subject to such requirements and transfer restrictions. However, restrictions can also be the result of different legal, regulatory, contractual, entity- or country-specific arrangements and / or requirements.

→ Refer to "Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups" in the "Significant regulated subsidiary and sub-group information" section of this report for financial information on significant regulated subsidiaries of the group

Restricted financial assets	31.12.17	31.12.16
<i>CHF million</i>		
<b>Financial assets pledged as collateral</b>		
Trading portfolio assets	46,257	36,549
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	35,363	30,260
Loans <sup>1</sup>	17,631	19,887
Financial assets designated at fair value	170	776
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	170	636
<b>Total financial assets pledged as collateral<sup>2</sup></b>	<b>64,059</b>	<b>57,213</b>
<b>Other restricted financial assets</b>		
Due from banks	3,280	2,625
Reverse repurchase agreements	0	658
Trading portfolio assets	12,273	12,129
Cash collateral receivables on derivative instruments	3,822	4,329
Loans	1,256	958
Financial assets designated at fair value	2,225	0
Financial assets available for sale	246	247
Other	95	5,195
<b>Total other restricted financial assets</b>	<b>23,196</b>	<b>26,141</b>
<b>Total financial assets pledged and other restricted financial assets</b>	<b>87,255</b>	<b>83,354</b>

<sup>1</sup> All related to mortgage loans that serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances. Of these pledged mortgage loans, approximately CHF 2.1 billion for 31 December 2017 (31 December 2016: approximately CHF 1.9 billion) could be withdrawn or used for future liabilities or covered bond issuances without breaching existing collateral requirements. <sup>2</sup> Does not include assets placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes (31 December 2017: CHF 2.5 billion; 31 December 2016: CHF 4.7 billion).

## Note 23 Restricted and transferred financial assets (continued)

### b) Transferred financial assets that are not derecognized in their entirety

The table below presents information for financial assets that have been transferred but are subject to continued recognition in full, as well as recognized liabilities associated with those transferred assets.

#### Transferred financial assets subject to continued recognition in full

<i>CHF million</i>	31.12.17		31.12.16	
	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet
Trading portfolio assets that may be sold or repledged by counterparties	35,363	12,942	30,260	11,260
<i>relating to securities lending and repurchase agreements in exchange for cash received</i>	13,145	12,942	11,410	11,260
<i>relating to securities lending agreements in exchange for securities received</i>	21,137	0	17,341	0
<i>relating to other financial asset transfers</i>	1,081	0	1,509	0
Financial assets designated at fair value that may be sold or repledged by counterparties	170	169	636	630
<b>Total financial assets transferred</b>	<b>35,533</b>	<b>13,111</b>	<b>30,896</b>	<b>11,890</b>

Transactions in which financial assets are transferred, but continue to be recognized in their entirety on UBS AG's balance sheet include securities lending and repurchase agreements as well as other financial asset transfers. Repurchase and securities lending arrangements are, for the most part, conducted under standard market agreements and are undertaken with counterparties subject to UBS AG's normal credit risk control processes.

→ Refer to Note 1a item 3e for more information on repurchase agreements and securities lending agreements

As of 31 December 2017, approximately one-third of the transferred financial assets were trading portfolio assets transferred in exchange for cash, in which case the associated recognized liability represents the amount to be repaid to counterparties. For securities lending and repurchase agreements, a haircut between 0% and 15% is generally applied to the transferred assets, which results in associated liabilities having a carrying value below the carrying value of the transferred assets. The counterparties to the associated liabilities presented in the table above have full recourse to UBS AG.

In securities lending arrangements entered into in exchange for the receipt of other securities as collateral, neither the securities received nor the obligation to return them are recognized on UBS AG's balance sheet, as the risks and rewards of ownership are not transferred to UBS AG. In cases where such financial assets received are subsequently sold or repledged in another transaction, this is not considered to be a transfer of financial assets.

Other financial asset transfers primarily include securities transferred to collateralize derivative transactions, for which the carrying value of associated liabilities is not provided in the table above because those replacement values are managed on a portfolio basis across counterparties and product types, and therefore there is no direct relationship between the specific collateral pledged and the associated liability.

Transferred financial assets that are not subject to derecognition in full, but remain on the balance sheet to the extent of UBS AG's continuing involvement, were not material as of 31 December 2017 and as of 31 December 2016.

## Note 23 Restricted and transferred financial assets (continued)

### c) Transferred financial assets that are derecognized in their entirety with continuing involvement

Continuing involvement in a transferred and fully derecognized financial asset may result from contractual provisions in the transfer agreement or from a separate agreement with the counterparty or a third party entered into in connection with the transfer.

#### Purchased and retained interests in securitization vehicles

In cases where UBS AG has transferred assets into a securitization vehicle and retained or purchased interests therein, UBS AG has a continuing involvement in those transferred assets.

As of 31 December 2017, the majority of the retained continuing involvement related to securitization positions held in the trading portfolio, primarily collateralized debt obligations, US commercial mortgage-backed securities and residential mortgage-backed securities. The fair value and carrying amount of UBS AG's continuing involvement related to these purchased and retained interests was CHF 8 million as of 31 December 2017, and UBS AG recognized gains of CHF 4 million in 2017

related to these positions. As of 31 December 2017, life-to-date losses of CHF 1,170 million were recorded related to the positions held as of 31 December 2017.

As of 31 December 2016, the fair value and carrying amount of UBS AG's continuing involvement related to purchased and retained interests in securitization vehicles was CHF 5 million, and UBS AG recognized gains of CHF 11 million in 2016 related to these positions. As of 31 December 2016, life-to-date losses of CHF 1,173 million were recorded related to the positions held as of 31 December 2016.

The maximum exposure to loss related to purchased and retained interests in securitization structures was CHF 14 million as of 31 December 2017 compared with CHF 28 million as of 31 December 2016.

Undiscounted cash outflows of CHF 7 million may be payable to the transferee in future periods as a consequence of holding the purchased and retained interests. The earliest period in which payment may be required is less than one month.

### d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged, that are not recognized on the balance sheet, but that are held as collateral, including amounts that have been sold or repledged.

#### Off-balance sheet assets received

CHF million	31.12.17	31.12.16
Fair value of assets received that can be sold or repledged	469,132	429,327
<i>received as collateral under reverse repurchase, securities borrowing and lending arrangements, derivative transactions and other transactions<sup>1</sup></i>	462,460	423,524
<i>received in unsecured borrowings</i>	6,672	5,803
Thereof sold or repledged <sup>2</sup>	337,514	316,324
<i>in connection with financing activities</i>	293,295	277,341
<i>to satisfy commitments under short sale transactions</i>	30,463	22,825
<i>in connection with derivative and other transactions<sup>1</sup></i>	13,756	16,158

<sup>1</sup> Includes securities received as initial margin from its clients that UBS AG is required to remit to CCPs, brokers and deposit banks through its exchange-traded derivative (ETD) clearing and execution services.

<sup>2</sup> Does not include off-balance sheet securities (31 December 2017: CHF 28.1 billion; 31 December 2016: CHF 30.9 billion) placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there are no associated liabilities or contingent liabilities.

## Note 24 Offsetting financial assets and financial liabilities

UBS AG enters into netting agreements with counterparties to manage the credit risks associated primarily with repurchase and reverse repurchase transactions, securities borrowing and lending, over-the-counter (OTC) derivatives and exchange-traded derivatives (ETD). These netting agreements and similar arrangements generally enable the counterparties to set off liabilities against available assets received in the ordinary course of business and / or in the event that the counterparty to the transaction is unable to fulfill its contractual obligations. The right of setoff is a legal right to settle or otherwise eliminate all or a portion of an amount due by applying an amount receivable from the same counterparty against it, thus reducing credit exposure.

The table below provides a summary of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral received to

mitigate credit exposures for these financial assets. The gross financial assets of UBS AG that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated balance sheet line, after giving effect to financial liabilities with the same counterparties that have been offset on the balance sheet and other financial assets not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial liabilities and collateral received that are not offset on the balance sheet are shown to arrive at financial assets after consideration of netting potential.

UBS AG engages in a variety of counterparty credit mitigation strategies in addition to netting and collateral arrangements. Therefore, the net amounts presented in the tables on this and on the next page do not purport to represent UBS AG's actual credit exposure.

### Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

	Assets subject to netting arrangements						Assets not subject to netting arrangements <sup>4</sup>	Total assets		
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet <sup>3</sup>				Assets recognized on the balance sheet	Total assets after consideration of netting potential	Total assets recognized on the balance sheet
	Gross assets before netting	Netting with gross liabilities <sup>2</sup>	Net assets recognized on the balance sheet	Financial liabilities	Collateral received	Assets after consideration of netting potential				
<i>As of 31.12.17, CHF billion</i>										
Cash collateral on securities borrowed	3.7	0.0	3.7	(0.6)	(3.1)	0.0	8.7	8.7	12.4	
Reverse repurchase agreements	140.5	(76.8)	63.7	(6.9)	(56.8)	0.0	13.5	13.5	77.2	
Positive replacement values	114.3	(2.1)	112.2	(83.5)	(20.7)	8.0	6.0	14.0	118.2	
Cash collateral receivables on derivative instruments <sup>1</sup>	21.6	(1.0)	20.6	(11.7)	(0.7)	8.1	2.9	11.0	23.4	
Financial assets designated at fair value	0.4	0.0	0.4	0.0	(0.2)	0.2	58.1	58.4	58.6	
<b>Total assets</b>	<b>280.5</b>	<b>(79.9)</b>	<b>200.6</b>	<b>(102.7)</b>	<b>(81.6)</b>	<b>16.4</b>	<b>89.2</b>	<b>105.6</b>	<b>289.9</b>	
<i>As of 31.12.16, CHF billion</i>										
Cash collateral on securities borrowed	4.2	0.0	4.2	(0.9)	(3.3)	0.0	10.9	10.9	15.1	
Reverse repurchase agreements	128.4	(71.5)	56.9	(2.1)	(54.8)	0.0	9.3	9.3	66.2	
Positive replacement values	152.3	(2.5)	149.8	(113.1)	(26.7)	10.0	8.6	18.6	158.4	
Cash collateral receivables on derivative instruments <sup>1</sup>	37.2	(15.1)	22.1	(14.2)	(1.0)	7.0	4.5	11.5	26.7	
Financial assets designated at fair value	1.7	0.0	1.7	0.0	(0.6)	1.1	63.3	64.4	65.0	
<b>Total assets</b>	<b>323.8</b>	<b>(89.1)</b>	<b>234.7</b>	<b>(130.3)</b>	<b>(86.3)</b>	<b>18.1</b>	<b>96.7</b>	<b>114.8</b>	<b>331.5</b>	

<sup>1</sup> The net amount of Cash collateral receivables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. Effective 3 January 2017, interest rate swaps and credit derivatives transacted with the Chicago Mercantile Exchange (CME) were legally converted from the previous collateral model to a settlement model resulting in a derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of CME interest rate swaps with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding IAS 32 netting, decreased by approximately CHF 11.4 billion as of 31 December 2017, with no change to net cash collateral receivables and payables on derivative instruments recognized and presented on the balance sheet. <sup>2</sup> The logic of the table results in amounts presented in the "Netting with gross liabilities" column corresponding directly to the amounts presented in the "Netting with gross assets" column in the liabilities table presented on the following page. <sup>3</sup> For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial assets presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. <sup>4</sup> Includes assets not subject to enforceable netting arrangements and other out-of-scope items.

## Note 24 Offsetting financial assets and financial liabilities (continued)

The table below provides a summary of financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral pledged to mitigate credit exposures for these financial liabilities. The gross financial liabilities of UBS AG that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated

balance sheet line, after giving effect to financial assets with the same counterparties that have been offset on the balance sheet and other financial liabilities not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial assets and collateral pledged that are not offset on the balance sheet are shown to arrive at financial liabilities after consideration of netting potential.

### Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

	Liabilities subject to netting arrangements						Liabilities not subject to netting arrangements <sup>4</sup>	Total liabilities		
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet <sup>3</sup>				Liabilities recognized on the balance sheet	Total liabilities after consideration of netting potential	Total liabilities recognized on the balance sheet
	Gross liabilities before netting	Netting with gross assets <sup>2</sup>	Net liabilities recognized on the balance sheet	Financial assets	Collateral pledged	Liabilities after consideration of netting potential				
<i>As of 31.12.17, CHF billion</i>										
Cash collateral on securities lent	1.7	0.0	1.7	(0.6)	(1.2)	0.0	0.1	0.1	1.8	
Repurchase agreements	88.4	(76.8)	11.6	(6.9)	(4.7)	0.0	3.6	3.6	15.3	
Negative replacement values	111.4	(2.1)	109.4	(83.5)	(15.0)	10.9	6.8	17.7	116.1	
Cash collateral payables on derivative instruments <sup>1</sup>	29.5	(1.0)	28.4	(16.3)	(1.2)	11.0	1.8	12.8	30.2	
Financial liabilities designated at fair value	1.9	0.0	1.9	0.0	(0.1)	1.8	52.3	54.1	54.2	
<b>Total liabilities</b>	<b>233.0</b>	<b>(79.9)</b>	<b>153.0</b>	<b>(107.3)</b>	<b>(22.1)</b>	<b>23.7</b>	<b>64.6</b>	<b>88.3</b>	<b>217.6</b>	
<i>As of 31.12.16, CHF billion</i>										
Cash collateral on securities lent	2.6	0.0	2.6	(0.9)	(1.7)	0.0	0.2	0.2	2.8	
Repurchase agreements	76.7	(71.5)	5.2	(2.1)	(3.1)	0.0	1.4	1.4	6.6	
Negative replacement values	146.3	(2.5)	143.9	(113.1)	(16.6)	14.2	10.0	24.2	153.8	
Cash collateral payables on derivative instruments <sup>1</sup>	48.5	(15.1)	33.4	(20.8)	(1.4)	11.2	2.1	13.3	35.5	
Financial liabilities designated at fair value	2.8	0.0	2.8	0.0	(0.2)	2.6	52.2	54.8	55.0	
<b>Total liabilities</b>	<b>276.9</b>	<b>(89.1)</b>	<b>187.9</b>	<b>(137.0)</b>	<b>(22.9)</b>	<b>28.0</b>	<b>65.9</b>	<b>93.9</b>	<b>253.7</b>	

<sup>1</sup> The net amount of Cash collateral payables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. Effective 3 January 2017, interest rate swaps and credit derivatives transacted with the Chicago Mercantile Exchange (CME) were legally converted from the previous collateral model to a settlement model resulting in a derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of CME interest rate swaps with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding IAS 32 netting, decreased by approximately CHF 11.4 billion as of 31 December 2017, with no change to net cash collateral receivables and payables on derivative instruments recognized and presented on the balance sheet. <sup>2</sup> The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding directly to the amounts presented in the "Netting with gross liabilities" column in the assets table presented on the previous page. <sup>3</sup> For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial liabilities presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. <sup>4</sup> Includes liabilities not subject to enforceable netting arrangements and other out-of-scope items.

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments

### a) Measurement categories of financial assets and liabilities

The table below provides information about the carrying amounts of individual classes of financial instruments within the measurement categories of financial assets and liabilities as defined in IAS 39, *Financial Instruments: Recognition and Measurement*. Only those assets and liabilities that are financial instruments as

defined in IAS 32, *Financial Instruments: Presentation* are included in the table below, which causes certain balances to differ from those presented on the balance sheet.

→ Refer to Note 22 for more information on how the fair value of financial instruments is determined

#### Measurement categories of financial assets and financial liabilities

CHF million	31.12.17	31.12.16
<b>Financial assets<sup>1</sup></b>		
<b>Held for trading</b>		
Trading portfolio assets	126,244	92,112
Due to customers <sup>2</sup>	7	12
Debt issued <sup>2</sup>	10	38
Positive replacement values	118,229	158,411
<b>Total</b>	<b>244,489</b>	<b>250,572</b>
<b>Fair value through profit or loss</b>		
Financial assets designated at fair value	58,556	65,024
Other assets	122	131
<b>Total</b>	<b>58,678</b>	<b>65,155</b>
<b>Financial assets at amortized cost</b>		
Cash and balances with central banks	87,775	107,767
Due from banks	13,693	13,125
Cash collateral on securities borrowed	12,393	15,111
Reverse repurchase agreements	77,240	66,246
Cash collateral receivables on derivative instruments	23,434	26,664
Loans <sup>3</sup>	321,718	307,004
Financial assets held to maturity	9,166	9,289
Other assets	27,986	18,519
<b>Total</b>	<b>573,405</b>	<b>563,727</b>
<b>Available for sale</b>		
Financial assets available for sale	8,665	15,676
<b>Total financial assets</b>	<b>885,237</b>	<b>895,131</b>
<b>Financial liabilities</b>		
<b>Held for trading</b>		
Trading portfolio liabilities	30,463	22,825
Negative replacement values	116,134	153,810
<b>Total</b>	<b>146,598</b>	<b>176,635</b>
<b>Fair value through profit or loss</b>		
Financial liabilities designated at fair value	54,202	55,017
Amounts due under unit-linked investment contracts	11,523	9,286
Other liabilities	122	131
<b>Total</b>	<b>65,847</b>	<b>64,434</b>
<b>Financial liabilities at amortized cost</b>		
Due to banks	7,533	10,645
Cash collateral on securities lent	1,789	2,818
Repurchase agreements	15,255	6,612
Cash collateral payables on derivative instruments	30,247	35,472
Due to customers	447,148	450,211
Debt issued	104,759	79,036
Other liabilities	37,064	38,992
<b>Total</b>	<b>643,795</b>	<b>623,786</b>
<b>Total financial liabilities</b>	<b>856,240</b>	<b>864,855</b>

<sup>1</sup> As of 31 December 2017, CHF 134 billion of Loans, CHF 0 billion of Due from banks, CHF 2 billion of Reverse repurchase agreements, CHF 7 billion of Financial assets available for sale, CHF 24 billion of Financial assets designated at fair value and CHF 7 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. As of 31 December 2016, CHF 126 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 10 billion of Financial assets available for sale, CHF 29 billion of Financial assets designated at fair value and CHF 8 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. <sup>2</sup> Represents the embedded derivative component of structured financial instruments for which the fair value option has not been applied and that is presented within Due to customers and Debt issued on the balance sheet. <sup>3</sup> Includes finance lease receivables of CHF 1.1 billion as of 31 December 2017 (31 December 2016: CHF 1.0 billion). Refer to Notes 10 and 31 for more information.



## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### b) Maximum exposure to credit risk

The tables on the following pages provide UBS AG's maximum exposure to credit risk by class of financial instrument and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral, such as

real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security. The section "Risk management and control" describes management's view of credit risk and the related exposures, which can differ in certain respects from the requirements of IFRS.

#### Maximum exposure to credit risk

	31.12.17								
	Maximum exposure to credit risk	Collateral				Credit enhancements			Exposure to credit risk after collateral and credit enhancements
Cash collateral received		Collateralized by securities	Secured by real estate	Other collateral <sup>1</sup>	Netting	Credit derivative contracts	Guarantees		
<i>CHF billion</i>									
<b>Financial assets measured at amortized cost on the balance sheet</b>									
Balances with central banks	87.1								87.1
Due from banks <sup>2</sup>	13.7		0.1						13.6
Cash collateral on securities borrowed	12.4		12.2						0.2
Reverse repurchase agreements	77.2		72.8		4.2				0.2
Cash collateral receivables on derivative instruments <sup>3,4</sup>	23.4					12.5			11.0
Loans <sup>5</sup>	321.7	17.9	111.4	160.1	15.9		0.0	1.3	15.1
Financial assets held to maturity	9.2								9.2
Other assets	25.8		19.5						6.3
<b>Total financial assets measured at amortized cost</b>	<b>570.6</b>	<b>17.9</b>	<b>216.0</b>	<b>160.1</b>	<b>20.1</b>	<b>12.5</b>	<b>0.0</b>	<b>1.3</b>	<b>142.7</b>
<b>Financial assets measured at fair value on the balance sheet</b>									
Positive replacement values <sup>4</sup>	118.2		4.0			100.2			14.0
Trading portfolio assets – debt instruments <sup>6,7</sup>	25.7								25.7
Financial assets designated at fair value – debt instruments <sup>8</sup>	58.4		9.8						48.5
Financial assets available for sale – debt instruments <sup>8</sup>	7.9								7.9
<b>Total financial assets measured at fair value</b>	<b>210.2</b>	<b>0.0</b>	<b>13.8</b>	<b>0.0</b>	<b>0.0</b>	<b>100.2</b>	<b>0.0</b>	<b>0.0</b>	<b>96.2</b>
<b>Total maximum exposure to credit risk reflected on the balance sheet</b>									
Guarantees <sup>9</sup>	18.8	1.0	2.1	0.2	1.2			3.0	11.3
Loan commitments <sup>9</sup>	39.1		2.8	1.1	9.5		1.0	1.4	23.3
Forward starting transactions, reverse repurchase and securities borrowing agreements	12.7		12.4						0.2
<b>Total maximum exposure to credit risk not reflected on the balance sheet</b>	<b>70.6</b>	<b>1.0</b>	<b>17.4</b>	<b>1.2</b>	<b>10.7</b>	<b>0.0</b>	<b>1.0</b>	<b>4.4</b>	<b>34.8</b>
<b>Total</b>	<b>851.4</b>	<b>18.9</b>	<b>247.1</b>	<b>161.3</b>	<b>30.8</b>	<b>112.7</b>	<b>1.1</b>	<b>5.8</b>	<b>273.7</b>

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### Maximum exposure to credit risk (continued)

CHF billion	31.12.16								
	Maximum exposure to credit risk	Collateral				Credit enhancements			Exposure to credit risk after collateral and credit enhancements
		Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral <sup>1</sup>	Netting	Credit derivative contracts	Guarantees	
<b>Financial assets measured at amortized cost on the balance sheet</b>									
Balances with central banks	107.1								107.1
Due from banks <sup>2</sup>	13.1								13.1
Cash collateral on securities borrowed	15.1		14.8						0.3
Reverse repurchase agreements	66.2		62.5		3.2				0.5
Cash collateral receivables on derivative instruments <sup>3,4</sup>	26.7					15.1			11.5
Loans <sup>5</sup>	307.0	17.9	99.6	158.2	14.6		0.1	1.8	14.8
Financial assets held to maturity	9.3								9.3
Other assets	18.6		10.0						8.7
<b>Total financial assets measured at amortized cost</b>	<b>563.2</b>	<b>17.9</b>	<b>186.9</b>	<b>158.2</b>	<b>17.7</b>	<b>15.1</b>	<b>0.1</b>	<b>1.8</b>	<b>165.3</b>
<b>Financial assets measured at fair value on the balance sheet</b>									
Positive replacement values <sup>4</sup>	158.4		5.3			134.5			18.6
Trading portfolio assets – debt instruments <sup>6,7</sup>	21.9								21.9
Financial assets designated at fair value – debt instruments <sup>8</sup>	64.8		2.6				0.6		61.6
Financial assets available for sale – debt instruments <sup>8</sup>	14.9								14.9
<b>Total financial assets measured at fair value</b>	<b>260.0</b>	<b>0.0</b>	<b>7.9</b>	<b>0.0</b>	<b>0.0</b>	<b>134.5</b>	<b>0.6</b>	<b>0.0</b>	<b>117.0</b>
<b>Total maximum exposure to credit risk reflected on the balance sheet</b>									
Guarantees <sup>9</sup>	16.7	1.4	2.0	0.2	1.2		0.1	3.0	8.8
Loan commitments <sup>9</sup>	54.4	0.1	3.9	1.0	9.5		4.8	2.0	33.1
Forward starting transactions, reverse repurchase and securities borrowing agreements	10.2		10.2						0.0
<b>Total maximum exposure to credit risk not reflected on the balance sheet</b>	<b>81.3</b>	<b>1.5</b>	<b>16.1</b>	<b>1.1</b>	<b>10.6</b>	<b>0.0</b>	<b>4.9</b>	<b>5.1</b>	<b>41.9</b>
<b>Total</b>	<b>904.5</b>	<b>19.4</b>	<b>210.9</b>	<b>159.4</b>	<b>28.4</b>	<b>149.6</b>	<b>5.7</b>	<b>6.8</b>	<b>324.3</b>

<sup>1</sup> Includes but is not limited to life insurance contracts, inventory, accounts receivable, mortgage loans, patents and copyrights. <sup>2</sup> Due from banks includes amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. <sup>3</sup> Included within Cash collateral receivables on derivative instruments are margin balances due from exchanges or clearing houses. Some of these margin balances reflect amounts transferred on behalf of clients who retain the associated credit risk. <sup>4</sup> The amount shown in the netting column represents the netting potential not recognized on the balance sheet. Refer to Note 24 for more information. <sup>5</sup> Collateral arrangements generally incorporate a range of collateral, including cash, securities, property and other collateral. In 2017, we further aligned our collateral allocation processes within Wealth Management Americas to prioritize collateral mainly according to its liquidity profile. This change resulted in increases in loans secured by cash and decreases in loans secured by securities of CHF 4.5 billion. <sup>6</sup> These positions are generally managed under the market risk framework. For the purpose of this disclosure, collateral and credit enhancements were not considered. <sup>7</sup> Does not include debt instruments held for unit-linked investment contracts and investment fund units. <sup>8</sup> Does not include investment fund units. Financial assets designated at fair value collateralized by securities consisted of structured loans and reverse repurchase and securities borrowing agreements. <sup>9</sup> The amount shown in the "Guarantees" column largely relates to sub-participations. Refer to the "Treasury management" section of this report for more information.

### Maximum exposure to credit risk for financial assets designated at fair value

The maximum exposure to credit risk of loans, but not structured loans, designated at fair value is generally mitigated by credit derivatives or similar instruments. As of 31 December 2017, the credit risk of such loans with a total notional amount of CHF 4 million (31 December 2016: CHF 609 million) was mitigated by credit derivatives for which the notional amount and fair value were not material (31 December 2016: notional amount was CHF 578 million, fair value was negative CHF 7 million).

Changes in the fair value of loans designated at fair value attributable to changes in credit risk were not material for the years ended 31 December 2017 and 31 December 2016 and from inception until 31 December 2017 and 31 December 2016.

Similarly, changes in the fair value of credit derivatives mitigating the credit risk of loans designated at fair value were not material for the years ended 31 December 2017 and 31 December 2016 and from inception until 31 December 2017 and 31 December 2016.

→ Refer to Note 22 for more information on financial assets designated at fair value

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### c) Financial assets subject to credit risk by rating category

#### Financial assets subject to credit risk by rating category

<i>CHF billion</i>		31.12.17					
Rating category <sup>1</sup>	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	86.6	0.5					87.1
Due from banks	0.6	10.6	1.4	0.9	0.3		13.7
Cash collateral on securities borrowed and reverse repurchase agreements	24.3	36.4	16.8	10.4	1.8		89.6
Positive replacement values	17.0	75.3	19.4	6.2	0.3		118.2
Cash collateral receivables on derivative instruments	6.5	9.7	5.6	1.6	0.1		23.4
Trading portfolio assets – debt instruments <sup>2</sup>	10.3	7.4	3.0	2.1	3.0		25.7
Loans	3.2	163.6	65.7	70.0	17.6	1.5	321.7
Financial assets designated at fair value – debt instruments <sup>3</sup>	33.8	14.2	1.5	0.8	8.0		58.4
Financial assets available for sale – debt instruments <sup>3</sup>	6.8	1.0		0.1			7.9
Financial assets held to maturity	8.5	0.7					9.2
Other assets	0.1	0.4	8.4	15.9	0.8	0.3	25.8
<b>Guarantees, commitments and forward starting transactions</b>							
Guarantees	2.0	9.1	4.1	2.7	0.8	0.2	18.8
Loan commitments	1.9	15.4	9.4	5.8	6.5		39.1
Forward starting transactions, reverse repurchase and securities borrowing agreements		12.7					12.7
<b>Total</b>	<b>201.7</b>	<b>356.8</b>	<b>135.2</b>	<b>116.5</b>	<b>39.1</b>	<b>2.0</b>	<b>851.4</b>

<i>CHF billion</i>		31.12.16					
Rating category <sup>1</sup>	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	106.2	0.9					107.1
Due from banks	0.6	9.7	2.0	0.5	0.3		13.1
Cash collateral on securities borrowed and reverse repurchase agreements	29.2	24.5	20.1	6.9	0.7		81.4
Positive replacement values	19.6	96.9	34.2	7.4	0.4		158.4
Cash collateral receivables on derivative instruments	6.4	12.2	6.4	1.6	0.2		26.7
Trading portfolio assets – debt instruments <sup>2</sup>	9.0	6.9	2.9	1.7	1.3		21.9
Loans	31.7	127.8	63.2	63.6	19.1	1.6	307.0
Financial assets designated at fair value – debt instruments <sup>3</sup>	48.4	12.6	1.0	1.6	1.3		64.8
Financial assets available for sale – debt instruments <sup>3</sup>	12.7	1.8	0.2	0.1			14.9
Financial assets held to maturity	8.4	0.9					9.3
Other assets	0.1	2.1	6.2	7.7	2.2	0.3	18.6
<b>Guarantees, commitments and forward starting transactions</b>							
Guarantees	2.0	6.4	3.7	3.6	0.7	0.3	16.7
Loan commitments	2.4	19.5	17.1	8.7	6.5	0.1	54.4
Forward starting transactions, reverse repurchase and securities borrowing agreements	0.6	9.4	0.3				10.2
<b>Total</b>	<b>277.4</b>	<b>331.6</b>	<b>157.2</b>	<b>103.5</b>	<b>32.7</b>	<b>2.2</b>	<b>904.5</b>

<sup>1</sup> Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories. <sup>2</sup> Does not include debt instruments held for unit-linked investment contracts and investment fund units. <sup>3</sup> Does not include investment fund units.

## Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

### d) Maturity analysis of financial liabilities

The contractual maturities for non-derivative and non-trading financial liabilities as of 31 December 2017 are based on the earliest date on which UBS could be contractually required to pay. The total amounts that contractually mature in each time band are also shown for 31 December 2016. Derivative positions

and trading liabilities, predominantly made up of short sale transactions, are assigned to the column *Due within 1 month*, as this provides a conservative reflection of the nature of these trading activities. The contractual maturities may extend over significantly longer periods.

#### Maturity analysis of financial liabilities<sup>1</sup>

CHF billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
<b>Financial liabilities recognized on balance sheet<sup>2</sup></b>						
Due to banks	6.1	0.4	1.0	0.1	0.0	7.5
Cash collateral on securities lent	1.7	0.2				1.9
Repurchase agreements	11.9	2.8	0.6	0.0	0.0	15.3
Trading portfolio liabilities <sup>3,4</sup>	30.5					30.5
Negative replacement values <sup>3</sup>	116.1					116.1
Cash collateral payables on derivative instruments	30.2					30.2
Due to customers	394.8	11.4	5.8	22.2	19.1	453.3
Financial liabilities designated at fair value <sup>5</sup>	18.4	10.3	11.6	8.8	7.1	56.3
Debt issued	4.1	14.5	44.5	34.8	12.5	110.3
Other liabilities	47.4					47.4
<b>Total 31.12.17</b>	<b>661.2</b>	<b>39.6</b>	<b>63.4</b>	<b>65.9</b>	<b>38.7</b>	<b>868.9</b>
Total 31.12.16	706.7	39.2	40.2	45.9	45.6	877.7

#### Guarantees, commitments and forward starting transactions<sup>6</sup>

Loan commitments	38.2	0.2	0.2	0.1		38.7
Guarantees	18.8	0.0				18.9
<b>Forward starting transactions</b>						
Reverse repurchase agreements	12.7					12.7
Securities borrowing agreements	0.0					0.0
<b>Total 31.12.17</b>	<b>69.7</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>70.2</b>
Total 31.12.16	81.0	0.2	0.2	0.0	0.0	81.4

<sup>1</sup> Non-financial liabilities such as deferred income, deferred tax liabilities, provisions and liabilities on employee compensation plans are not included in this analysis. <sup>2</sup> Except for trading portfolio liabilities and negative replacement values (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. <sup>3</sup> Carrying value is fair value. Management believes that this best represents the cash flows that would have to be paid if these positions had to be settled or closed out. Refer to Note 12 for undiscounted cash flows of derivatives designated in hedge accounting relationships. <sup>4</sup> Contractual maturities of trading portfolio liabilities are: CHF 29.5 billion due within one month (2016: CHF 21.8 billion), CHF 0.8 billion due between one month and one year (2016: CHF 1.0 billion) and CHF 0.1 billion due between 1 and 5 years (2016: CHF 0.1 billion). <sup>5</sup> Future interest payments on variable rate liabilities are determined by reference to the applicable interest rate prevailing as of the reporting date. Future principal payments that are variable are determined by reference to the conditions existing at the reporting date. <sup>6</sup> Comprises the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

### e) Reclassification of financial assets

In 2008 and 2009, certain financial assets were reclassified from *Trading portfolio assets* to *Loans*. On their reclassification date, these assets had fair values of CHF 26 billion and CHF 0.6 billion, respectively.

The reclassification of financial assets reflected UBS's change in intent and ability to hold these financial assets for the foreseeable future rather than for trading in the near term. The financial assets were reclassified using their fair value on the date of the reclassification, which became their new cost basis at that date.

As of 31 December 2017, the carrying value of the remaining

reclassified financial assets, which were entirely comprised of municipal auction rate securities, was CHF 0.1 billion (31 December 2016: CHF 0.2 billion), which was approximately equal to the fair value of these assets.

The overall effect on operating profit before tax from reclassified financial assets for the year ended 31 December 2017 was a profit of CHF 1 million (2016: CHF 1 million). If the financial assets had not been reclassified, the impact on operating profit before tax for the year ended 31 December 2017 would have been a loss of CHF 4 million.

## Note 26 Pension and other post-employment benefit plans

The table below provides information about expenses for pension and other post-employment benefit plans. These expenses are part of *Personnel expenses*.

### Income statement – expenses related to pension and other post-employment benefit plans

CHF million	31.12.17	31.12.16	31.12.15
Net periodic expenses for defined benefit plans	359	433	568
of which: related to major pension plans <sup>1</sup>	347	412	546
of which: Swiss plan <sup>2</sup>	302	381	515
of which: UK plan	14	(2)	18
of which: US and German plans	31	33	12
of which: related to post-employment medical insurance plans <sup>3</sup>	3	4	4
of which: UK plan	1	1	1
of which: US plans	2	3	2
of which: related to remaining plans and other expenses <sup>4</sup>	8	17	19
Expenses for defined contribution plans <sup>5</sup>	232	236	239
of which: UK plans	64	77	86
of which: US plan	108	106	100
of which: remaining plans	59	53	53
<b>Total pension and other post-employment benefit plan expenses<sup>6</sup></b>	<b>591</b>	<b>669</b>	<b>807</b>

<sup>1</sup> Refer to Note 26a for more information. <sup>2</sup> The decrease in net periodic pension expenses for the Swiss pension plan in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. <sup>3</sup> Refer to Note 26b for more information. <sup>4</sup> Other expenses include differences between actual and estimated performance award accruals and net accrued pension expenses related to restructuring. <sup>5</sup> Refer to Note 26c for more information. <sup>6</sup> Refer to Note 6.

The table below provides information relating to amounts recognized in *Other comprehensive income* for defined benefit plans.

### Other comprehensive income – gains / (losses) on defined benefit plans

CHF million	31.12.17	31.12.16	31.12.15
Major pension plans <sup>1</sup>	266	(837)	339
of which: Swiss plan	(56)	(105)	58
of which: UK plan	295	(610)	317
of which: US and German plans	28	(122)	(35)
Post-employment medical insurance plans <sup>2</sup>	1	(13)	(3)
of which: UK plan	1	(6)	6
of which: US plans	0	(7)	(9)
Remaining plans	31	(26)	(14)
Gains / (losses) recognized in other comprehensive income, before tax	299	(876)	322
Tax (expense) / benefit relating to defined benefit plans recognized in other comprehensive income	6	52	(19)
<b>Gains / (losses) recognized in other comprehensive income, net of tax<sup>3</sup></b>	<b>305</b>	<b>(824)</b>	<b>304</b>

<sup>1</sup> Refer to Note 26a for more information. <sup>2</sup> Refer to Note 26b for more information. <sup>3</sup> Refer to the "Statement of comprehensive income."

## Note 26 Pension and other post-employment benefit plans (continued)

UBS AG recognizes assets and liabilities with respect to defined benefit plans within *Other assets* and *Other liabilities*.

As of 31 December 2017 and 31 December 2016, the Swiss pension plan was in a surplus situation. However, a surplus is only recognized on the balance sheet to the extent that it does

not exceed the estimated future economic benefit. Since the estimated future economic benefit was zero as of 31 December 2017 and 31 December 2016, no net defined benefit pension asset was recognized on the balance sheet.

The table below provides information on UBS AG's liabilities with respect to defined benefit plans.

### Balance sheet – net defined benefit pension and post-employment liability

CHF million	31.12.17	31.12.16
Major pension plans <sup>1</sup>	805	1,140
<i>of which: Swiss plan</i>	0	0
<i>of which: UK plan</i>	268	529
<i>of which: US and German plans<sup>2</sup></i>	536	611
Post-employment medical insurance plans <sup>3</sup>	86	91
<i>of which: UK plan</i>	26	26
<i>of which: US plans</i>	59	65
Remaining plans	34	34
<b>Total net defined benefit pension and post-employment liability<sup>4</sup></b>	<b>925</b>	<b>1,266</b>

<sup>1</sup> Refer to Note 26a for more information. <sup>2</sup> Of the total liability as of 31 December 2017, CHF 149 million related to US plans and CHF 388 million related to German plans (31 December 2016: CHF 265 million related to US plans and CHF 346 million related to German plans). <sup>3</sup> Refer to Note 26b for more information. <sup>4</sup> Refer to Note 21.

## Note 26 Pension and other post-employment benefit plans (continued)

### a) Defined benefit pension plans

UBS AG has established defined benefit pension plans for its employees in various jurisdictions, with the major plans located in Switzerland, the UK, the US and Germany.

The overall investment policy and strategy for UBS AG's defined benefit pension plans is guided by the objective of achieving an investment return that, together with contributions, ensures that there will be sufficient assets to pay pension benefits as they fall due while also mitigating various risks. For the plans with assets, i.e. funded plans, the investment strategies are managed under local laws and regulations in each jurisdiction. The asset allocation is determined by the governance body with reference to the prevailing current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. Within this framework, UBS AG ensures that the fiduciaries consider how the asset investment strategy correlates with the maturity profile of the plan liabilities and the respective potential effect on the funded status of the plans, including potential short-term liquidity requirements.

The defined benefit obligations (DBOs) for all of UBS AG's defined benefit pension plans are directly affected by changes in yields of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan, as the applicable discount rate used to determine the DBO is based on these yields. For the funded plans, the pension assets are invested in a diversified portfolio of financial assets, including real estate, bonds, investment funds and cash, across geographic regions to ensure a balance of risk and return. Under IAS 19, volatility arises in each pension plan's net asset / liability position because the fair value of the plan's financial assets is not fully correlated to movements in the value of the plan's DBO. Specific asset-liability matching strategies for each pension plan are independently determined by the responsible governance body. The net asset / liability volatility for each plan is dependent on the specific financial assets chosen by each plan's governance body. For certain pension plans, a liability-driven investment approach is applied to a portion of the plan assets to reduce potential volatility.

#### Swiss pension plan

The Swiss pension plan covers employees of UBS AG and employees of companies having close economic or financial ties with UBS AG and exceeds the minimum benefit requirements under Swiss pension law.

In 2017, a significant number of employees transferred from UBS AG to UBS Business Solutions AG, which is a directly held subsidiary of UBS Group AG. There continues to be one pooled pension plan in Switzerland covering the employees of UBS AG and those transferred to UBS Business Solutions AG. UBS AG

and UBS Business Solutions AG both are legal sponsors of UBS's Swiss pension plan. Since the date of the employee transfer, UBS AG and UBS Business Solutions AG apply proportionate defined benefit accounting, i.e., the net pension cost, any OCI impacts from remeasurements and the net pension asset / liability of the Swiss pension plan are allocated proportionally between UBS AG and UBS Business Solutions AG based on the aggregated net pension cost and defined benefit obligations related to their employees.

Contributions to the pension plan are paid by both the employer and the employees. The Swiss pension plan allows employees to choose the level of contributions paid by them. Employee contributions are calculated as a percentage of the contributory salary and are deducted monthly. The percentages deducted from salary depend on age and choice of contribution category and vary between 1% and 13.5% of contributory base salary and between 0% and 9% of contributory variable compensation. Depending on the age of the employee, UBS AG pays a contribution that ranges between 6.5% and 27.5% of contributory base salary and between 3.6% and 9% of contributory variable compensation. UBS AG also pays risk contributions that are used to finance benefits paid out in the event of death and disability, as well as to finance bridging pensions.

The plan benefits include retirement, disability and survivor benefits. The pension plan offers to members at the normal retirement age of 64 a choice between a lifetime pension with or without full restitution and a partial or full lump sum payment. Members can draw early retirement benefits starting from the age of 58. Employees have the possibility to make additional purchases of benefits to fund early retirement benefits (Plan 58+).

The pension amount payable is a result of the conversion rate applied on the accumulated balance of the individual plan participant's pension account at the retirement date. The accumulated balance of each individual plan participant's pension account is based on credited vested benefits transferred from previous employers, purchases of benefits and the employee and employer contributions that have been made to the pension account of each individual plan participant, as well as the interest accrued on the accumulated balance. The interest rate accrued is defined annually by the Pension Foundation Board.

Although the Swiss pension plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IAS 19, primarily because of the obligation to accrue interest on the pension accounts and the payment of lifetime pension benefits.

## Note 26 Pension and other post-employment benefit plans (continued)

The Swiss pension plan is governed by a Pension Foundation Board. The responsibilities of this board are defined by Swiss pension law and by the plan rules. An actuarial valuation under Swiss pension law is performed regularly. According to Swiss pension law, a temporary limited underfunding is permitted. However, should an underfunded situation occur, the Pension Foundation Board is required to take the necessary measures to ensure that full funding can be expected to be restored within a maximum period of 10 years. If a Swiss pension plan were to become significantly underfunded on a Swiss pension law basis, additional employer and employee contributions could be required. In this situation, the risk is shared between employer and employees, and the employer is not legally obliged to cover more than 50% of the additional contributions required. As of 31 December 2017, the Swiss pension plan had a technical funding ratio under Swiss pension law of 131.9% (31 December 2016: 125.4%).

The investment strategy of the Swiss plan is implemented on the basis of a multi-level investment and risk management process and complies with Swiss pension law, including the rules and regulations relating to diversification of plan assets. These rules, among others, specify restrictions to the composition of plan assets, e.g., there is a limit of 50% for investments in equities. The investment strategy of the Swiss plan is aligned with the defined risk budget set out by the Pension Foundation Board. The risk budget is determined on the basis of regularly performed asset and liability management analyses. In order to implement the risk budget, the Swiss plan may use direct investments, investment funds and derivatives. To mitigate foreign currency risk, a specific currency hedging strategy is in place. The Pension Foundation Board strives for a medium- and long-term balance between assets and liabilities.

As of 31 December 2017, the Swiss pension plan was in a surplus situation on an International Financial Reporting Standards (IFRS) measurement basis, as the fair value of plan assets exceeded the DBO by CHF 1,940 million (31 December 2016: surplus of CHF 1,749 million). However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit, which equals the difference between the present value of the estimated future net service cost and the present value of the estimated future employer contributions. The maximum future economic benefit is highly variable based on changes in the discount rate. Both as of 31 December 2017 and 31 December 2016, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet. As of 31 December 2017, the difference between the pension plan surplus and the estimated future economic benefit, i.e., the asset ceiling effect, was CHF 1,940 million (31 December 2016: CHF 1,749 million). CHF 999 million out of the total movement of CHF 1,008 million was recognized in *Other comprehensive income* and CHF 9 million related to interest expense on the asset ceiling effect was recognized in the income statement. As of 31 December 2016, CHF 452 million out of the total movement of CHF 466 million was recognized in *Other comprehensive income* and CHF 14 million

related to interest expense on the asset ceiling effect was recognized in the income statement.

The employer contributions expected to be made to the Swiss pension plan in 2018 are estimated to be CHF 294 million.

→ **Refer to Note 35 for information on changes to the Swiss pension plan that will take effect from the start of 2019**

### Non-Swiss pension plans

UBS AG locations outside of Switzerland offer various defined benefit pension plans in accordance with local regulations and practices. The non-Swiss locations with major defined benefit pension plans are the UK, the US and Germany. Defined benefit pension plans in other locations are not material to the financial results of UBS AG and hence not separately disclosed.

The non-Swiss plans provide benefits in the event of retirement, death or disability. The level of benefits provided depends on the specific rate of benefit accrual and the level of employee compensation. UBS AG's general principle is to ensure that the plans are adequately funded on the basis of actuarial valuations. Local pension regulations and tax requirements are the primary drivers for determining when contributions are required.

### UK pension plan

The UK plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation. Normal retirement age for participants in the UK plan is 60. The UK plan is closed to new entrants and pension plan participants are no longer accruing benefits for current or future service. Employees instead participate in the UK defined contribution plan.

The governance responsibility for the UK plan lies jointly with the Pension Trustee Board, which is required under local pension laws, and UBS AG. The employer contributions to the pension fund reflect agreed-upon deficit-funding contributions, which are determined on the basis of the most recent actuarial valuation using assumptions agreed by the Pension Trustee Board and UBS AG. In the event of underfunding, UBS AG and the Pension Trustee Board must agree on a deficit recovery plan within statutory deadlines. In 2017 and 2016, UBS AG did not make any deficit-funding contributions.

The plan assets are invested in a diversified portfolio of financial assets. A liability-driven investment approach is applied, as a portion of the plan assets is invested in inflation-indexed bonds that provide a partial hedge against price inflation. If price inflation increases, the DBO will likely increase more significantly than the change in the fair value of plan assets, which would result in an increase in the net defined benefit liability. Plan rules and local pension legislation cap the level of inflationary increase that can be applied to plan benefits.

As the plan is obligated to provide guaranteed lifetime pension benefits to plan participants upon retirement, increases in life expectancy will result in an increase in the plan's liabilities. The sensitivity to changes in life expectancy is particularly high in the UK plan as the pension benefits are indexed to price inflation.



## Note 26 Pension and other post-employment benefit plans (continued)

As of 31 December 2017, the UK plan was in a deficit situation on an IFRS measurement basis as the DBO exceeded the fair value of plan assets by CHF 268 million (31 December 2016: deficit of CHF 529 million).

No employer contributions are currently scheduled to be made to the UK defined benefit pension plan in 2018, subject to periodic review.

### US pension plans

There are two distinct major defined benefit pension plans in the US. Normal retirement age for participants in both US plans is 65. The plans are closed to new entrants, who instead can participate in defined contribution plans.

One of the major defined benefit pension plans is a contribution-based plan in which each participant accrues a percentage of salary in a pension account. The pension account is credited annually with interest based on a rate that is linked to the average yield on one-year US government bonds. For the other major defined benefit pension plan, retirement benefits accrue based on the career-average earnings of each individual plan participant. Former employees with vested benefits have the option to take a lump sum payment or a lifetime annuity commencing early or at retirement age.

As required under local state pension laws, both plans have fiduciaries who, together with UBS AG, are responsible for the governance of the plans. UBS AG regularly reviews the contribution strategy for these plans. In determining the contribution strategy, UBS AG considers local statutory funding rules and the cost of any premiums that must be paid to the Pension Benefit Guaranty Corporation for having an underfunded plan. In 2017, the contributions made by UBS AG were CHF 89 million (2016: CHF 172 million).

The plan assets for both plans are invested in a diversified portfolio of financial assets. Each pension plan's fiduciaries are responsible for the investment decisions with respect to the plan assets. Both US plans apply a liability-driven investment

approach to support the volatility management in the net asset / liability position. Derivative instruments may also be employed to manage volatility.

The employer contributions expected to be made to the US defined benefit pension plans in 2018 are estimated to be CHF 8 million.

### German pension plans

There are two different defined benefit pension plans in Germany, and both are contribution-based plans. No plan assets are set aside to fund these plans, and benefits are directly paid by UBS AG. Normal retirement age for the participants in the German plans is 65. Within the larger of the two pension plans, each participant accrues a percentage of salary in a pension account. The accumulated account balance of the plan participant is credited on an annual basis with guaranteed interest at a rate of 5%. In the other plan, amounts are accrued annually based on employee elections. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 4% for amounts accrued after 2009. Both German plans are regulated under German pension law, under which the responsibility to pay pension benefits when they are due rests entirely with UBS AG. For the German plans, a portion of the pension payments is directly increased in line with price inflation.

The benefits expected to be paid by UBS AG to the participants of the German plans in 2018 are estimated to be CHF 10 million.

### Financial information by plan

The tables on the following pages provide an analysis of the movement in the net asset / liability recognized on the balance sheet for defined benefit pension plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

**Note 26 Pension and other post-employment benefit plans (continued)**

**Defined benefit pension plans**

<i>CHF million</i>	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Defined benefit obligation at the beginning of the year	22,865	22,636	3,704	3,350	1,755	1,619	28,325	27,605
Current service cost	324	471	0	0	9	9	333	480
Interest expense	117	240	100	116	61	62	279	419
Plan participant contributions	155	210	0	0	0	0	155	210
Remeasurements	51	477	(82)	922	80	125	49	1,524
<i>of which: actuarial (gains) / losses due to changes in demographic assumptions</i>	4	(659)	(80)	(63)	(5)	3	(81)	(719)
<i>of which: actuarial (gains) / losses due to changes in financial assumptions</i>	138	698	47	1,022	84	107	269	1,827
<i>of which: experience (gains) / losses<sup>1</sup></i>	(90)	438	(49)	(37)	2	15	(138)	416
Curtailements	(27)	(96)	0	0	0	0	(27)	(96)
Benefit payments	(767)	(1,074)	(251)	(135)	(107)	(98)	(1,126)	(1,307)
Other movements <sup>2</sup>	(8,682)	0	0	0	0	19	(8,682)	19
Foreign currency translation	0	0	179	(549)	(29)	20	150	(529)
<b>Defined benefit obligation at the end of the year</b>	<b>14,035</b>	<b>22,865</b>	<b>3,650</b>	<b>3,704</b>	<b>1,770</b>	<b>1,755</b>	<b>19,454</b>	<b>28,325</b>
<i>of which: amounts owed to active members</i>	<i>6,437</i>	<i>10,419</i>	<i>176</i>	<i>290</i>	<i>248</i>	<i>258</i>	<i>6,861</i>	<i>10,967</i>
<i>of which: amounts owed to deferred members</i>	<i>0</i>	<i>0</i>	<i>1,881</i>	<i>2,210</i>	<i>628</i>	<i>584</i>	<i>2,510</i>	<i>2,794</i>
<i>of which: amounts owed to retirees</i>	<i>7,598</i>	<i>12,446</i>	<i>1,593</i>	<i>1,204</i>	<i>893</i>	<i>913</i>	<i>10,083</i>	<i>14,563</i>
Fair value of plan assets at the beginning of the year	24,614	23,919	3,175	3,400	1,144	997	28,934	28,316
Return on plan assets excluding amounts included in interest income	994	824	213	312	108	2	1,314	1,139
Interest income	128	258	86	118	44	44	257	420
Employer contributions	351	486	0	0	97	179	448	665
Plan participant contributions	155	210	0	0	0	0	155	210
Benefit payments	(767)	(1,074)	(251)	(135)	(107)	(98)	(1,126)	(1,307)
Administration expenses, taxes and premiums paid	(7)	(10)	0	0	(4)	(6)	(12)	(16)
Other movements <sup>2</sup>	(9,492)	0	0	0	0	0	(9,492)	0
Foreign currency translation	0	0	159	(520)	(48)	26	111	(494)
<b>Fair value of plan assets at the end of the year</b>	<b>15,975</b>	<b>24,614</b>	<b>3,381</b>	<b>3,175</b>	<b>1,234</b>	<b>1,144</b>	<b>20,590</b>	<b>28,934</b>
Asset ceiling effect at the beginning of the year	1,749	1,283	0	0	0	0	1,749	1,283
Interest expense on asset ceiling effect	9	14	0	0	0	0	9	14
Asset ceiling effect excluding interest expense on asset ceiling effect	999	452	0	0	0	0	999	452
Other movements <sup>2</sup>	(817)	0	0	0	0	0	(817)	0
<b>Asset ceiling effect at the end of the year</b>	<b>1,940</b>	<b>1,749</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,940</b>	<b>1,749</b>
<b>Net defined benefit asset / (liability)</b>	<b>0</b>	<b>0</b>	<b>(268)</b>	<b>(529)</b>	<b>(536)</b>	<b>(611)</b>	<b>(805)</b>	<b>(1,140)</b>
<b>Movement in the net asset / (liability) recognized on the balance sheet</b>								
<b>Net asset / (liability) recognized on the balance sheet at the beginning of the year</b>	<b>0</b>	<b>0</b>	<b>(529)</b>	<b>50</b>	<b>(611)</b>	<b>(622)</b>	<b>(1,140)</b>	<b>(572)</b>
Net periodic expenses recognized in net profit	(302)	(381)	(14)	2	(31)	(33)	(347)	(412)
Gains / (losses) recognized in other comprehensive income	(56)	(105)	295	(610)	28	(122)	266	(837)
Employer contributions	351	486	0	0	97	179	448	665
Other movements	8	0	0	0	0	(19)	8	(19)
Foreign currency translation	0	0	(20)	29	(20)	6	(39)	35
<b>Net asset / (liability) recognized on the balance sheet at the end of the year</b>	<b>0</b>	<b>0</b>	<b>(268)</b>	<b>(529)</b>	<b>(536)</b>	<b>(611)</b>	<b>(805)</b>	<b>(1,140)</b>
<b>Funded and unfunded plans</b>								
Defined benefit obligation from funded plans	14,035	22,865	3,650	3,704	1,291	1,316	18,975	27,885
Defined benefit obligation from unfunded plans	0	0	0	0	479	440	479	440
Plan assets	15,975	24,614	3,381	3,175	1,234	1,144	20,590	28,934
<b>Surplus / (deficit)</b>	<b>1,940</b>	<b>1,749</b>	<b>(268)</b>	<b>(529)</b>	<b>(536)</b>	<b>(611)</b>	<b>1,135</b>	<b>609</b>
<b>Asset ceiling effect</b>	<b>1,940</b>	<b>1,749</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,940</b>	<b>1,749</b>
<b>Net defined benefit asset / (liability)</b>	<b>0</b>	<b>0</b>	<b>(268)</b>	<b>(529)</b>	<b>(536)</b>	<b>(611)</b>	<b>(805)</b>	<b>(1,140)</b>

<sup>1</sup> Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. <sup>2</sup> Primarily reflects the transfer of employees from UBS AG to UBS Business Solutions AG.

## Note 26 Pension and other post-employment benefit plans (continued)

### Analysis of amounts recognized in net profit

CHF million	Swiss plan		UK plan		US and German plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended								
Current service cost	324	471	0	0	9	9	333	480
Interest expense related to defined benefit obligation	117	240	100	116	61	62	279	419
Interest income related to plan assets	(128)	(258)	(86)	(118)	(44)	(44)	(257)	(420)
Interest expense on asset ceiling effect	9	14	0	0	0	0	9	14
Administration expenses, taxes and premiums paid	7	10	0	0	4	6	12	16
Curtailments	(27)	(96)	0	0	0	0	(27)	(96)
<b>Net periodic expenses recognized in net profit</b>	<b>302</b>	<b>381</b>	<b>14</b>	<b>(2)</b>	<b>31</b>	<b>33</b>	<b>347</b>	<b>412</b>

### Analysis of amounts recognized in other comprehensive income (OCI)

CHF million	Swiss plan		UK plan		US and German plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended								
Remeasurement of defined benefit obligation	(51)	(477)	82	(922)	(80)	(125)	(49)	(1,524)
Return on plan assets excluding amounts included in interest income	994	824	213	312	108	2	1,314	1,139
Asset ceiling effect excluding interest expense on asset ceiling effect	(999)	(452)	0	0	0	0	(999)	(452)
<b>Total gains / (losses) recognized in other comprehensive income, before tax</b>	<b>(56)</b>	<b>(105)</b>	<b>295</b>	<b>(610)</b>	<b>28</b>	<b>(122)</b>	<b>266</b>	<b>(837)</b>

The table below provides information on the duration of the DBO and the timing for expected benefit payments.

	Swiss plan <sup>1</sup>		UK plan		US and German plans <sup>2</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Duration of the defined benefit obligation (in years)</b>	<b>15.1</b>	<b>15.1</b>	<b>20.0</b>	<b>22.6</b>	<b>10.6</b>	<b>10.6</b>
<b>Maturity analysis of benefits expected to be paid</b>						
CHF million						
Benefits expected to be paid within 12 months	689	1,140	81	72	105	103
Benefits expected to be paid between 1 and 3 years	1,389	2,204	177	164	212	213
Benefits expected to be paid between 3 and 6 years	2,085	3,394	328	315	321	328
Benefits expected to be paid between 6 and 11 years	3,326	5,439	699	710	558	562
Benefits expected to be paid between 11 and 16 years	3,090	5,041	786	856	501	514
Benefits expected to be paid in more than 16 years	10,453	17,162	4,216	6,064	865	958

<sup>1</sup> The decrease in benefits expected to be paid in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. <sup>2</sup> The duration of the defined benefit obligation represents a weighted average across US and German plans.

## Note 26 Pension and other post-employment benefit plans (continued)

### Actuarial assumptions

The measurement of each pension plan's DBO considers different actuarial assumptions. Changes in those assumptions lead to volatility in the DBO. The following principal actuarial assumptions are applied:

- Discount rate: the discount rate is based on the yield of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan. Consequently, a decrease in the yield of high-quality corporate bonds increases the DBO. Conversely, an increase in the yield of high-quality corporate bonds decreases the DBO.
- Rate of salary increase: an increase in the salary of plan participants generally increases the DBO, specifically for the Swiss and German plans. For the UK plan, as the plan is closed for future service, UBS AG employees no longer accrue future service benefits and thus salary increases have no effect on the DBO. For the US plans, only a small percentage of the total population continues to accrue benefits for future service and therefore the effect of a salary increase on the DBO is minimal.
- Rate of pension increase: for the Swiss plan, there is no automatic indexing of pensions. Any increase would be decided by the Pension Foundation Board. For the US plans, there is also no automatic indexing of pensions. For the UK plan, pensions are automatically indexed to price inflation as per plan rules and local pension legislation. The German plans are also automatically indexed and a portion of the pensions are directly increased by price inflation. An increase in price inflation in the UK and Germany increases the respective plan's DBO.
- Rate of interest credit on retirement savings: the Swiss plan and one of the US plans have retirement saving balances that are increased annually by an interest credit rate. For these plans, an increase in the interest credit rate increases the respective plan's DBO.
- Life expectancy: for most of UBS AG's defined benefit pension plans, the respective plan is obligated to provide guaranteed lifetime pension benefits. The DBO for all plans is calculated using an underlying best estimate of the life expectancy of plan participants. An increase in the life expectancy of plan participants increases the plan's DBO.

The actuarial assumptions used for the pension plans are based on the economic conditions prevailing in the jurisdiction in which they are offered.

→ Refer to Note 1a item 7 for a description of the accounting policy for defined benefit pension plans

### Changes in actuarial assumptions

UBS AG regularly reviews the actuarial assumptions used in calculating its DBO to determine their continuing relevance.

### Swiss pension plan

In 2017, a net loss of CHF 51 million was recognized in *Other comprehensive income* (OCI) related to the remeasurement of the DBO. This was primarily due to a market-driven decrease in the discount rate, which resulted in an OCI loss of CHF 164 million. This effect was partly offset by experience gains of CHF 90 million, reflecting differences between the previous actuarial assumptions and what actually occurred, and by market-driven changes to the assumed rate of interest credit on retirement savings, which resulted in a gain of CHF 26 million. Changes in other assumptions were not significant.

In 2016, UBS AG continued to enhance its methodology for estimating the discount rate by improving the construction of the yield curve from Swiss high-quality corporate bonds. Furthermore, UBS AG refined its approach for estimating the life expectancy, the rate of employee disability and the rate of salary increases. These changes in estimates decreased the DBO of the Swiss pension plan by CHF 319 million, of which changes in demographic assumptions decreased the DBO by CHF 659 million and changes in financial assumptions increased the DBO by CHF 339 million. However, the effect from these changes in estimates was more than offset by experience losses and market-driven changes in the discount rate, resulting in a total upward remeasurement of the Swiss plan DBO of CHF 477 million recognized in OCI.

### UK pension plan

In 2017, a net gain of CHF 82 million was recognized in OCI related to the remeasurement of the DBO for the UK plan. This was primarily driven by changes in the life expectancy assumption, which resulted in a gain of CHF 80 million. In addition, market-driven changes in the inflation rate assumption resulted in a gain of CHF 60 million and experience gains were CHF 49 million. These gains were partly offset by a market-driven decrease in the discount rate, which resulted in a loss of CHF 105 million.

In 2016, a net loss of CHF 922 million was recognized in OCI related to the remeasurement of the DBO for the UK plan, resulting from a loss of CHF 866 million due to a market-driven decrease in the discount rate and a loss of CHF 156 million from market-driven changes in the inflation rate assumption, partly offset by a gain of CHF 63 million from changes in the life expectancy assumption and an experience gain of CHF 37 million.

### US and German pension plans

In 2017, a net loss of CHF 80 million was recognized in OCI related to the remeasurement of the DBO for the US and German plans compared with a net loss of CHF 125 million in 2016. OCI losses in both years were primarily driven by market-driven decreases in discount rates.

## Note 26 Pension and other post-employment benefit plans (continued)

The tables below show the principal actuarial assumptions used in calculating the DBO at the end of the year.

### Principal actuarial assumptions used

In %	Swiss plan		UK plan		US and German plans <sup>1</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate	0.67	0.73	2.55	2.69	3.14	3.58
Rate of salary increase	1.30	1.30	0.00	0.00	2.83	2.86
Rate of pension increase	0.00	0.00	3.11	3.18	1.50	1.50
Rate of interest credit on retirement savings	0.67	0.73	0.00	0.00	2.56	1.74

<sup>1</sup> Represents weighted average assumptions across US and German plans.

### Mortality tables and life expectancies for major plans

Country	Mortality table	Life expectancy at age 65 for a male member currently			
		aged 65		aged 45	
		31.12.17	31.12.16	31.12.17	31.12.16
Switzerland	BVG 2015 G with CMI 2016 projections <sup>1</sup>	21.6	21.5	23.0	22.9
UK	S2PA with CMI 2016 projections <sup>2</sup>	23.4	23.7	24.6	25.0
USA	RP2014 WCHA with MP2017 projection scale <sup>3</sup>	22.8	22.9	24.4	24.4
Germany	Dr. K. Heubeck 2005 G	20.3	20.1	22.9	22.8

Country	Mortality table	Life expectancy at age 65 for a female member currently			
		aged 65		aged 45	
		31.12.17	31.12.16	31.12.17	31.12.16
Switzerland	BVG 2015 G with CMI 2016 projections <sup>1</sup>	23.4	23.4	24.9	24.9
UK	S2PA with CMI 2016 projections <sup>2</sup>	25.2	25.6	26.5	27.4
USA	RP2014 WCHA with MP2017 projection scale <sup>3</sup>	24.4	24.5	26.0	26.1
Germany	Dr. K. Heubeck 2005 G	24.3	24.2	26.8	26.7

<sup>1</sup> In 2016, the mortality table BVG 2015 G with proposed CMI 2016 was used. <sup>2</sup> In 2016, the mortality table S2PA with CMI 2015 projections was used. <sup>3</sup> In 2016, the mortality table RP2014 WCHA with MP2016 projection scale was used.

### Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption, showing how the DBO would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen

circumstances may arise, which could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below on the DBO as the sensitivities may not be linear.

### Sensitivity analysis of significant actuarial assumptions<sup>1</sup>

Increase / (decrease) in defined benefit obligation CHF million	Swiss plan <sup>2</sup>		UK plan		US and German plans	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
<b>Discount rate</b>						
Increase by 50 basis points	(875)	(1,435)	(341)	(388)	(88)	(86)
Decrease by 50 basis points	996	1,630	391	452	96	94
<b>Rate of salary increase</b>						
Increase by 50 basis points	60	86	-3	-3	1	1
Decrease by 50 basis points	(57)	(79)	-3	-3	(1)	(1)
<b>Rate of pension increase</b>						
Increase by 50 basis points	708	1,178	370	435	7	6
Decrease by 50 basis points	- <sup>4</sup>	- <sup>4</sup>	(327)	(377)	(6)	(6)
<b>Rate of interest credit on retirement savings</b>						
Increase by 50 basis points	164	264	- <sup>5</sup>	- <sup>5</sup>	9	9
Decrease by 50 basis points	(155)	(250)	- <sup>5</sup>	- <sup>5</sup>	(9)	(8)
<b>Life expectancy</b>						
Increase in longevity by one additional year	485	796	139	136	47	44

<sup>1</sup> The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded. <sup>2</sup> The decrease in sensitivity in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. <sup>3</sup> As the plan is closed for future service, a change in assumption is not applicable. <sup>4</sup> As the assumed rate of pension increase was 0% as of 31 December 2017 and as of 31 December 2016, a downward change in assumption is not applicable. <sup>5</sup> As the UK plan does not provide interest credits on retirement savings, a change in assumption is not applicable.

## Note 26 Pension and other post-employment benefit plans (continued)

### Fair value of plan assets

The tables below provide information on the composition and fair value of plan assets of the Swiss, the UK and the US pension plans.

#### Composition and fair value of plan assets

##### Swiss plan

CHF million	31.12.17			Plan asset allocation %	31.12.16			Plan asset allocation %
	Fair value				Fair value			
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<b>Cash and cash equivalents</b>	<b>72</b>	<b>0</b>	<b>72</b>	<b>0</b>	<b>869</b>	<b>0</b>	<b>869</b>	<b>4</b>
<b>Real estate / property</b>								
Domestic	0	1,714	1,714	11	0	2,689	2,689	11
<b>Investment funds</b>								
Equity								
Domestic	400	0	400	3	938	0	938	4
Foreign	4,499	798	5,297	33	6,558	1,170	7,728	31
Bonds <sup>1</sup>								
Domestic, AAA to BBB-	1,366	0	1,366	9	2,222	0	2,222	9
Foreign, AAA to BBB-	3,821	0	3,821	24	5,877	0	5,877	24
Foreign, below BBB-	346	0	346	2	1,176	0	1,176	5
Real estate								
Foreign	0	14	14	0	0	42	42	0
Other	516	2,423	2,940	18	283	2,776	3,059	12
<b>Other investments</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>0</b>
<b>Total fair value of plan assets</b>	<b>11,019</b>	<b>4,956</b>	<b>15,975</b>	<b>100</b>	<b>17,923</b>	<b>6,691</b>	<b>24,614</b>	<b>100</b>
			<b>31.12.17</b>				<b>31.12.16</b>	
<b>Total fair value of plan assets</b>			<b>15,975</b>				<b>24,614</b>	
<i>of which:<sup>2</sup></i>								
Bank accounts at UBS AG			117				432	
UBS AG debt instruments			3				5	
UBS Group AG shares			33				47	
Securities lent to UBS AG <sup>3</sup>			1,979				1,855	
Property occupied by UBS AG			83				83	
Derivative financial instruments, counterparty UBS AG <sup>3</sup>			23				(220)	

<sup>1</sup> The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB- and below BBB- represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification. <sup>2</sup> Bank accounts at UBS AG encompass accounts in the name of the Swiss pension fund. The other positions disclosed in the table encompass both direct investments in UBS AG instruments and UBS Group AG shares and indirect investments, i.e., those made through funds that the pension fund invests in. <sup>3</sup> Securities lent to UBS AG and derivative financial instruments are presented gross of any collateral. Securities lent to UBS AG were fully covered by collateral as of 31 December 2017 and 31 December 2016. Net of collateral, derivative financial instruments amounted to CHF 11 million as of 31 December 2017 (31 December 2016: CHF 76 million).

## Note 26 Pension and other post-employment benefit plans (continued)

### Composition and fair value of plan assets (continued)

#### UK plan

	31.12.17			Plan asset allocation %	31.12.16			Plan asset allocation %
	Fair value				Fair value			
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
<b>Cash and cash equivalents</b>	<b>159</b>	<b>0</b>	<b>159</b>	<b>5</b>	133	0	133	4
<b>Bonds<sup>1</sup></b>								
Domestic, AAA to BBB–	1,666	0	1,666	49	1,131	0	1,131	36
Domestic, below BBB–	1	0	1	0	1	0	1	0
<b>Investment funds</b>								
Equity								
Domestic	31	0	31	1	39	0	39	1
Foreign	1,020	0	1,020	30	984	0	984	31
Bonds <sup>1</sup>								
Domestic, AAA to BBB–	625	81	706	21	500	28	528	17
Domestic, below BBB–	21	0	21	1	23	0	23	1
Foreign, AAA to BBB–	143	0	143	4	245	0	245	8
Foreign, below BBB–	56	0	56	2	39	0	39	1
Real estate								
Domestic	100	27	128	4	39	72	111	4
Other	(4)	5	1	0	(35)	111	76	2
<b>Other investments<sup>2</sup></b>	<b>(560)</b>	<b>11</b>	<b>(549)</b>	<b>(16)</b>	(144)	10	(134)	(4)
<b>Total fair value of plan assets</b>	<b>3,257</b>	<b>124</b>	<b>3,381</b>	<b>100</b>	2,955	221	3,175	100

<sup>1</sup> The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification. <sup>2</sup> Mainly relates to repurchase arrangements on UK treasury bonds.

## Note 26 Pension and other post-employment benefit plans (continued)

### Composition and fair value of plan assets (continued)

#### US plans

	31.12.17			Weighted average plan asset allocation %	31.12.16			Weighted average plan asset allocation %
	Fair value				Fair value			
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
<b>Cash and cash equivalents</b>	74	0	74	6	75	0	75	7
<b>Bonds<sup>1</sup></b>								
Domestic, AAA to BBB–	195	0	195	16	158	0	158	14
Domestic, below BBB–	10	0	10	1	13	0	13	1
Foreign, AAA to BBB–	44	0	44	4	42	0	42	4
Foreign, below BBB–	1	0	1	0	1	0	1	0
<b>Investment funds</b>								
Equity								
Domestic	291	0	291	24	264	0	264	23
Foreign	270	0	270	22	248	0	248	22
Bonds <sup>1</sup>								
Domestic, AAA to BBB–	210	0	210	17	218	0	218	19
Domestic, below BBB–	19	0	19	2	18	0	18	2
Foreign, AAA to BBB–	46	0	46	4	42	0	42	4
Foreign, below BBB–	5	0	5	0	5	0	5	0
Real estate								
Domestic	0	12	12	1	0	11	11	1
Other	21	0	21	2	19	0	19	2
<b>Insurance contracts</b>	0	17	17	1	0	18	18	2
<b>Asset-backed securities</b>	15	0	15	1	8	0	8	1
<b>Other investments</b>	4	0	4	0	3	0	3	0
<b>Total fair value of plan assets</b>	<b>1,204</b>	<b>30</b>	<b>1,234</b>	<b>100</b>	<b>1,115</b>	<b>29</b>	<b>1,144</b>	<b>100</b>

<sup>1</sup> The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification.



## Note 26 Pension and other post-employment benefit plans (continued)

### b) Post-employment medical insurance plans

In the US and the UK, UBS AG offers post-employment medical insurance benefits that contribute to the health care coverage of certain employees and their beneficiaries after retirement. The UK post-employment medical insurance plan is closed to new entrants.

These plans are not prefunded. In the US, the retirees also contribute to the cost of the post-employment medical benefits.

The benefits expected to be paid by UBS AG to the post-employment medical insurance plans in 2018 are estimated to be CHF 5 million.

The table below provides an analysis of the movement in the net asset / liability recognized on the balance sheet for post-employment medical plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

#### Post-employment medical insurance plans

CHF million	UK plan		US plans		Total	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
For the year ended						
Post-employment benefit obligation at the beginning of the year	26	25	65	59	91	84
Current service cost	0	0	0	0	0	0
Interest expense	1	1	2	3	3	3
Plan participant contributions	0	0	3	2	3	2
Remeasurements	(1)	6	0	7	(1)	13
of which: actuarial (gains) / losses due to changes in demographic assumptions	0	1	0	(1)	(1)	0
of which: actuarial (gains) / losses due to changes in financial assumptions	(1)	5	2	1	2	6
of which: experience (gains) / losses <sup>1</sup>	0	0	(2)	6	(2)	6
Benefit payments <sup>2</sup>	(1)	(1)	(7)	(7)	(9)	(8)
Foreign currency translation	1	(4)	(3)	1	(1)	(3)
<b>Post-employment benefit obligation at the end of the year</b>	<b>26</b>	<b>26</b>	<b>59</b>	<b>65</b>	<b>86</b>	<b>91</b>
of which: amounts owed to active members	6	6	0	0	6	6
of which: amounts owed to deferred members	0	0	0	0	0	0
of which: amounts owed to retirees	20	21	59	65	79	86
Fair value of plan assets at the end of the year	0	0	0	0	0	0
<b>Net post-employment benefit asset / (liability)</b>	<b>(26)</b>	<b>(26)</b>	<b>(59)</b>	<b>(65)</b>	<b>(86)</b>	<b>(91)</b>

#### Analysis of amounts recognized in net profit

Current service cost	0	0	0	0	0	0
Interest expense related to post-employment benefit obligation	1	1	2	3	3	3
<b>Net periodic expenses</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>

#### Analysis of amounts recognized in other comprehensive income (OCI)

Remeasurement of post-employment benefit obligation	1	(6)	0	(7)	1	(13)
<b>Total gains / (losses) recognized in other comprehensive income, before tax</b>	<b>1</b>	<b>(6)</b>	<b>0</b>	<b>(7)</b>	<b>1</b>	<b>(13)</b>

<sup>1</sup> Experience (gains) / losses are a component of actuarial remeasurements of the post-employment benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. <sup>2</sup> Benefit payments are funded by employer contributions and plan participant contributions.

## Note 26 Pension and other post-employment benefit plans (continued)

### Actuarial assumptions

The measurement of each medical insurance plan's post-employment benefit obligation considers different actuarial assumptions. Changes in assumptions lead to volatility in the post-employment benefit obligation. The following principal actuarial assumptions are applied:

- Discount rate: discount rates used for post-employment medical insurance plans are the same as those used for defined benefit pension plans. A decrease in the yield of high-quality corporate bonds increases the post-employment benefit obligation. Conversely, an increase in the yield of high-quality corporate bonds decreases the post-employment benefit obligation.

- Average health care cost trend rate: an increase in health care costs generally increases the post-employment benefit obligation.
- Life expectancy: as some plan participants have lifetime benefits under these plans, an increase in life expectancy increases the post-employment benefit obligation.

UBS AG regularly reviews the actuarial assumptions used in calculating its post-employment benefit obligations to determine their continuing relevance. Principal actuarial assumptions used to determine post-employment benefit obligations at the end of the year were:

### Principal actuarial assumptions used<sup>1</sup>

In %	UK plan		US plans <sup>2</sup>	
	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate	2.55	2.69	3.54	3.97
Average health care cost trend rate – initial	5.10	5.10	7.99	7.03
Average health care cost trend rate – ultimate	5.10	5.10	4.50	4.50

<sup>1</sup> The assumptions for life expectancies are provided within Note 26a. <sup>2</sup> Represents weighted average assumptions across US plans.

### Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption showing how the post-employment benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen circumstances may arise, which

could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below on the post-employment benefit obligation, as the sensitivities may not be linear.

### Sensitivity analysis of significant actuarial assumptions<sup>1</sup>

Increase / (decrease) in post-employment benefit obligation CHF million	UK plan		US plans	
	31.12.17	31.12.16	31.12.17	31.12.16
<b>Discount rate</b>				
Increase by 50 basis points	(2)	(2)	(3)	(3)
Decrease by 50 basis points	2	2	3	3
<b>Average health care cost trend rate</b>				
Increase by 100 basis points	4	4	1	2
Decrease by 100 basis points	(3)	(3)	(1)	(1)
<b>Life expectancy</b>				
Increase in longevity by one additional year	2	2	4	5

<sup>1</sup> The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded.

### c) Defined contribution plans

UBS AG sponsors a number of defined contribution plans in locations outside Switzerland. The locations with significant defined contribution plans are the US and the UK. Certain plans allow employees to make contributions and earn matching or other contributions from UBS AG. Employer contributions to

defined contribution plans are recognized as an expense, which, for the years ended 31 December 2017, 2016 and 2015, amounted to CHF 232 million, CHF 236 million and CHF 239 million, respectively.

## Note 26 Pension and other post-employment benefit plans (continued)

### d) Related-party disclosure

UBS AG is the principal provider of banking services for the pension fund of UBS AG in Switzerland. In this capacity, UBS AG is engaged to execute most of the pension fund's banking activities. These activities can include, but are not limited to, trading, securities lending and borrowing and derivative transactions. The non-Swiss UBS AG pension funds do not have a similar banking relationship with UBS AG.

Also, UBS AG leases certain properties that are owned by the Swiss pension fund. As of 31 December 2017, the minimum commitment toward the Swiss pension fund under the related

leases was approximately CHF 5 million (31 December 2016: CHF 11 million).

→ Refer to the "Composition and fair value of plan assets" table in Note 26a for more information on fair value of investments in UBS AG instruments held by the Swiss pension fund

The following amounts have been received or paid by UBS AG from and to the pension and other post-employment benefit plans located in Switzerland, the UK and the US in respect of these banking activities and arrangements.

#### Related-party disclosure

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
<b>Received by UBS AG</b>			
Fees	36	36	33
<b>Paid by UBS AG</b>			
Rent	4	4	5
Dividends, capital repayments and interest	9	15	13

The transaction volumes in UBS Group AG shares and UBS AG debt instruments and the balances of UBS Group AG shares held as of 31 December were:

#### Transaction volumes – UBS Group AG shares and UBS AG debt instruments

	For the year ended	
	31.12.17	31.12.16
<b>Financial instruments bought by pension funds</b>		
UBS Group AG shares (in thousands of shares)	905	2,427
UBS AG debt instruments (par values, CHF million)	2	0
<b>Financial instruments sold by pension funds or matured</b>		
UBS Group AG shares (in thousands of shares)	2,897	1,618
UBS AG debt instruments (par values, CHF million)	4	0

#### UBS Group AG shares held by pension and other post-employment benefit plans

	31.12.17	31.12.16
Number of shares (in thousands of shares)	16,370	18,363
Fair value (CHF million)	293	293

## Note 27 Employee benefits: variable compensation

### a) Plans offered

UBS has several share-based and other compensation plans that align the interests of Group Executive Board (GEB) members, Key Risk Takers (KRTs) and other employees with the interests of shareholders and other investors. These compensation plans are also designed to meet regulatory requirements. Section a) of this Note provides a description of the most significant compensation plans.

For the majority of variable compensation awards granted under such plans to employees of UBS AG, the grantor entity is UBS Group AG. Expenses associated with these awards are charged by UBS Group AG to UBS AG. For the purpose of this Note, references to shares refer to UBS Group AG shares.

→ Refer to Note 1a item 6 for a description of the accounting policy related to share-based and other compensation plans

#### Mandatory deferred compensation plans

##### Equity Ownership Plan (EOP)

The EOP is a mandatory deferred compensation plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive at least 60% of their deferred performance award under the EOP in notional shares.

EOP awards granted to GEB members and certain other employees only vest if both Group and business division performance conditions are met. Group performance is measured based on the average adjusted return on tangible equity (RoTE) excluding deferred tax assets over the performance period. Business division performance is measured on the basis of the business division's average adjusted return on attributed equity (RoAE). For Corporate Center employees, it is measured on the basis of the average operating businesses RoAE.

Certain awards, such as replacement awards issued outside the normal performance year cycle, may take the form of deferred cash under the EOP plan rules.

Notional shares represent a promise to receive UBS shares at vesting and do not carry voting rights during the vesting period. Notional shares granted before February 2014 have no rights to dividends, whereas awards granted since February 2014 carry a dividend equivalent that may be paid in notional shares or cash and that vests on the same terms and conditions as the awards. However, awards that have been granted in February 2018 for the performance year 2017 to individuals who are deemed to be Material Risk Takers (MRTs) based on regulatory guidance in the EU do not carry such a dividend equivalent. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is

not permitted for legal or tax reasons. EOP awards generally vest in equal installments after two and three years following grant (for GEB members, generally after three, four and five years). The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

##### Deferred Contingent Capital Plan (DCCP)

The DCCP is a mandatory deferred compensation plan for all employees with total compensation greater than CHF / USD 300,000. DCCP awards granted up to January 2015 represent a right to receive a cash payment at vesting. For awards granted since February 2015, DCCP takes the form of notional additional tier 1 (AT1) capital instruments, which can be settled in the form of either a cash payment or a perpetual, marketable AT1 capital instrument, at the discretion of UBS. Awards vest in full after five years and up to seven years for certain employees subject to specific regulation in the UK unless there is a trigger event.

Awards are written down if the Group's common equity tier 1 (CET1) capital ratio falls below 10% for GEB members and below 7% for all other employees. Awards are also forfeited if a viability event occurs, that is, if FINMA notifies the firm in writing that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if the firm receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. As an additional performance condition, GEB members forfeit 20% of their award for each loss-making year during the vesting period.

For awards granted up to January 2015, interest on the awards is paid annually, provided that UBS achieved an adjusted profit before tax in the preceding year. For awards granted since February 2015, interest payments are discretionary. Awards granted to MRTs since February 2018 are not eligible for interest payments. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

##### Asset Management EOP

In order to align deferred compensation of certain Asset Management employees with the performance of the investment funds they manage, awards are granted to such employees in the form of cash-settled notional investment funds. The amount delivered depends on the value of the underlying investment funds at the time of vesting. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

## Note 27 Employee benefits: variable compensation (continued)

### Wealth Management Americas financial advisor compensation

In line with market practice for US wealth management businesses, the compensation for financial advisors in Wealth Management Americas is comprised of production payout and deferred compensation awards. Production payout, paid monthly in the form of non-deferred cash payments, is primarily based on compensable revenue.

Financial advisors may also qualify for deferred compensation awards, which vest over various time periods of up to 10 years. Production payout rates and deferred compensation awards may be reduced for, among other things, errors, negligence or carelessness, or a failure to comply with the firm's rules, standards, practices and policies or applicable laws and regulations.

#### Strategic objective awards

Strategic objective awards are deferred compensation awards based on strategic performance measures, including production, length of service with the firm and net new business. These awards are granted in the form of both deferred share-based and deferred cash-based awards with a vesting period of up to six years.

Through performance year 2016, strategic objective awards were partly granted under the PartnerPlus deferred cash plan. In addition to such granted awards (UBS AG company contributions), participants were also allowed to voluntarily contribute additional amounts otherwise payable as production payout up to a certain percentage, which vest upon contribution. Company contributions and voluntary contributions are credited with interest in accordance with the terms of the plan. Rather than being credited with interest, a participant may elect to have voluntary contributions, along with vested company contributions, credited with notional earnings based on the performance of various mutual funds. Company contributions and interest on both company and voluntary contributions ratably vest in 20% installments six to ten years following grant date. Company contributions and interest on notional earnings on both company and voluntary contributions are forfeitable under certain circumstances.

#### GrowthPlus

GrowthPlus is a compensation plan for selected financial advisors whose revenue production and length of service exceed defined thresholds from 2010 through 2017. Awards were granted in 2010, 2011, 2015 and early 2018. The awards are distributed over seven years, with the exception of 2018 awards, which will be distributed over five years.

#### Other compensation plans

##### Equity Plus Plan (Equity Plus)

Equity Plus is a voluntary share-based compensation plan that provides eligible employees with the opportunity to purchase UBS shares at market value and receive one notional share for every three shares purchased, up to a maximum annual limit. Share purchases may be made annually from the performance award and / or monthly through deductions from salary. If the shares purchased are held until three years from the start of the associated plan year and, in general, if the employee remains in employment,

the notional shares vest. For notional shares granted since April 2014, employees are entitled to receive a dividend equivalent, which may be paid in notional shares and / or cash.

##### Role-based allowances (RBAs)

Certain employees of legal entities regulated in the EU may receive an RBA in addition to their base salary. This allowance reflects the market value of a specific role and is only paid as long as the employee is within such a role. RBAs are offered in line with market practice and are generally paid in cash. In the UK, RBAs are awarded in cash and, above a certain threshold, in blocked UBS shares. Such shares will be unblocked in equal installments after two and three years. The compensation expense is recognized in the year of grant.

##### Discontinued deferred compensation plans

###### Senior Executive Equity Ownership Plan (SEEOP)

Up to February 2012, GEB members and selected senior executives received a portion of their mandatory deferral in UBS shares or notional shares, which vested in equal installments over a five-year vesting period and were forfeitable if certain conditions had not been met. The employee's business division or the Group as a whole had to be profitable in the financial year preceding scheduled vesting. Awards granted under SEEOP were settled by delivering UBS shares at vesting. No SEEOP awards have been granted since 2012.

###### Senior Executive Stock Option Plan (SESOP)

Up to February 2008, GEB members and selected senior executives were granted UBS options with a strike price set at 110% of the fair market value of a UBS share on the grant date. These awards vested in full following a three-year vesting period and generally expire ten years from the grant date. No SESOP awards have been granted since 2008.

###### Long-Term Deferred Retention Senior Incentive Scheme (LTDRSIS)

Awards under the LTDRSIS were granted to employees in Australia up to and including 2014 and represented a profit share amount based on the profitability of the Australian business. Awards vested after three years and included an arrangement that allowed for unpaid installments to be reduced if the business recorded a loss for the calendar year preceding vesting. The awards were generally forfeitable upon voluntary termination of employment with UBS.

###### Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP)

Until 2009, certain key and high-potential employees were granted discretionary share-settled stock appreciation rights (SARs) or options on UBS shares with a strike price not less than the market value of a UBS share on the date of grant. A SAR gives employees the right to receive a number of UBS shares equal to the value of any market price increase of a UBS share between the grant date and the exercise date. One option entitles the holder to acquire one registered UBS share at the option's strike price. SARs and options are settled by delivering UBS shares, except in jurisdictions where this is not permitted for legal reasons. No options or SARs awards have been granted since 2009.

## Note 27 Employee benefits: variable compensation (continued)

### b) Effect on the income statement

#### Effect on the income statement for the financial year and future periods

The table below provides information on compensation expenses related to total variable compensation, including financial advisor compensation in Wealth Management Americas, that were recognized in the financial year ended 31 December 2017, as well as expenses that were deferred and will be recognized in the

income statement for 2018 and later. The majority of expenses deferred to 2018 and later that are related to the performance year 2017 relates to awards granted in February 2018. The total compensation expense for unvested share-based awards granted up to 31 December 2017 will be recognized in future periods over a weighted average period of 2.1 years.

#### Variable compensation including Wealth Management Americas financial advisor compensation

CHF million	Expenses recognized in 2017			Expenses deferred to 2018 and later		
	Related to the performance year 2017	Related to prior performance years	Total	Related to the performance year 2017	Related to prior performance years	Total
Non-deferred cash	1,944	(24)	1,920	0	0	0
Deferred compensation awards	385	691	1,076	575	668	1,243
<i>of which: Equity Ownership Plan</i>	231	357	588	314	279	593
<i>of which: Deferred Contingent Capital Plan</i>	130	299	429	234	360	594
<i>of which: Asset Management EOP</i>	25	31	55	27	26	52
<i>of which: Other performance awards</i>	0	4	4	0	3	3
<b>Total variable compensation – performance awards</b>	<b>2,329</b>	<b>667</b>	<b>2,996</b>	<b>575</b>	<b>668</b>	<b>1,243</b>
Replacement payments	12	57	69	79	40	119
Forfeiture credits	0	(104)	(104)	0	0	0
Severance payments	93	0	93	0	0	0
Retention plan and other payments	24	37	61	29	31	61
Deferred Contingent Capital Plan: interest expense	0	108	108	78	212	290
<b>Total variable compensation – other</b>	<b>129</b>	<b>98</b>	<b>227</b>	<b>186</b>	<b>283</b>	<b>470</b>
Financial advisor compensation	2,995	252	3,247	153	779	932
<i>of which: non-deferred cash</i>	2,836	0	2,836	0	0	0
<i>of which: deferred share-based awards</i>	56	44	100	69	117	186
<i>of which: deferred cash-based awards</i>	102	209	311	84	662	746
Compensation commitments with recruited financial advisors <sup>1</sup>	30	710	740	360	2,009	2,369
<b>Total Wealth Management Americas: Financial advisor compensation</b>	<b>3,025</b>	<b>962</b>	<b>3,986</b>	<b>513</b>	<b>2,788</b>	<b>3,300</b>
<b>Total variable compensation including WMA FA compensation</b>	<b>5,483</b>	<b>1,727</b>	<b>7,209<sup>2</sup></b>	<b>1,274</b>	<b>3,739</b>	<b>5,013</b>

<sup>1</sup> Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. <sup>2</sup> Includes CHF 713 million in expenses related to share-based compensation (performance awards: CHF 588 million; other variable compensation: CHF 25 million; Wealth Management Americas financial advisor compensation: CHF 100 million). A further CHF 95 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 25 million, related to role-based allowances; Social security: CHF 48 million; Other personnel expenses: CHF 22 million, related to the Equity Plus Plan).

## Note 27 Employee benefits: variable compensation (continued)

### Variable compensation including Wealth Management Americas financial advisor compensation

CHF million	Expenses recognized in 2016			Expenses deferred to 2017 and later		
	Related to the performance year 2016	Related to prior performance years	Total	Related to the performance year 2016	Related to prior performance years	Total
Non-deferred cash	1,808	(41)	1,767	0	0	0
Deferred compensation awards	373	823	1,196	671	856	1,527
<i>of which: Equity Ownership Plan</i>	214	484	698	372	356	727
<i>of which: Deferred Contingent Capital Plan</i>	133	295	428	266	468	735
<i>of which: Asset Management EOP</i>	26	39	65	34	27	60
<i>of which: Other performance awards</i>	0	6	6	0	5	5
<b>Total variable compensation – performance awards</b>	<b>2,181</b>	<b>782</b>	<b>2,963</b>	<b>671</b>	<b>856</b>	<b>1,527</b>
Replacement payments	24	62	86	40	31	71
Forfeiture credits	0	(73)	(73)	0	0	0
Severance payments	217	0	217	0	0	0
Retention plan and other payments	25	51	76	24	27	50
Deferred Contingent Capital Plan: interest expense	0	112	112	98	243	341
<b>Total variable compensation – other</b>	<b>265</b>	<b>151</b>	<b>418</b>	<b>162</b>	<b>301</b>	<b>463</b>
Financial advisor compensation	2,651	247	2,898	196	893	1,089
<i>of which: non-deferred cash</i>	2,506	0	2,506	0	0	0
<i>of which: deferred share-based awards</i>	33	48	81	57	120	177
<i>of which: deferred cash-based awards</i>	112	199	311	139	773	912
Compensation commitments with recruited financial advisors <sup>1</sup>	43	756	799	607	2,120	2,727
<b>Total Wealth Management Americas: Financial advisor compensation</b>	<b>2,695</b>	<b>1,002</b>	<b>3,697</b>	<b>804</b>	<b>3,013</b>	<b>3,816</b>
<b>Total variable compensation including WMA FA compensation</b>	<b>5,142</b>	<b>1,935</b>	<b>7,078<sup>2</sup></b>	<b>1,637</b>	<b>4,169</b>	<b>5,806</b>

<sup>1</sup> Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. <sup>2</sup> Includes CHF 819 million in expenses related to share-based compensation (performance awards: CHF 698 million; other variable compensation: CHF 40 million; Wealth Management Americas financial advisor compensation: CHF 81 million). A further CHF 90 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 39 million, related to role-based allowances; Social security: CHF 27 million; Other personnel expenses: CHF 24 million, related to the Equity Plus Plan).

## Note 27 Employee benefits: variable compensation (continued)

### Variable compensation including Wealth Management Americas financial advisor compensation

CHF million	Expenses recognized in 2015			Expenses deferred to 2016 and later		
	Related to the performance year 2015	Related to prior performance years	Total	Related to the performance year 2015	Related to prior performance years	Total
Non-deferred cash	2,073	(94)	1,979	0	0	0
Deferred compensation awards	461	769	1,230	900	822	1,722
<i>of which: Equity Ownership Plan</i>	261	461	722	524	338	861
<i>of which: Deferred Contingent Capital Plan</i>	172	258	429	343	446	789
<i>of which: Asset Management EOP</i>	28	38	67	34	35	69
<i>of which: Other performance awards</i>	0	12	12	0	3	3
<b>Total variable compensation – performance awards</b>	<b>2,534</b>	<b>675</b>	<b>3,209</b>	<b>900</b>	<b>822</b>	<b>1,722</b>
Replacement payments	11	65	76	72	41	114
Forfeiture credits	0	(86)	(86)	0	0	0
Severance payments	157	0	157	0	0	0
Retention plan and other payments	15	103	118	15	52	67
Deferred Contingent Capital Plan: interest expense	0	80	80	160	200	360
<b>Total variable compensation – other</b>	<b>184</b>	<b>162</b>	<b>346</b>	<b>248</b>	<b>293</b>	<b>541</b>
Financial advisor compensation	2,629	187	2,816	776	571	1,347
<i>of which: non-deferred cash</i>	2,460	0	2,460	0	0	0
<i>of which: deferred share-based awards</i>	37	45	82	66	115	182
<i>of which: deferred cash-based awards</i>	132	142	275	710	456	1,166
Compensation commitments with recruited financial advisors <sup>1</sup>	43	692	735	940	1,899	2,839
<b>Total Wealth Management Americas: Financial advisor compensation</b>	<b>2,673</b>	<b>879</b>	<b>3,552</b>	<b>1,716</b>	<b>2,470</b>	<b>4,186</b>
<b>Total variable compensation including WMA FA compensation</b>	<b>5,391</b>	<b>1,716</b>	<b>7,107<sup>2</sup></b>	<b>2,864</b>	<b>3,585</b>	<b>6,449</b>

<sup>1</sup> Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. <sup>2</sup> Includes CHF 858 million in expenses related to share-based compensation (performance awards: CHF 722 million; other variable compensation: CHF 54 million; Wealth Management Americas financial advisor compensation: CHF 82 million). A further CHF 108 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 26 million, related to role-based allowances; Social security: CHF 61 million; Other personnel expenses: CHF 21 million, related to the Equity Plus Plan).



## Note 27 Employee benefits: variable compensation (continued)

### c) Outstanding share-based compensation awards

#### Share and performance share awards

Movements in outstanding share-based awards under the EOP plan during 2017 and 2016 are provided in the table below. The awards presented are granted by UBS AG, but are based on UBS Group AG shares.

#### Movements in outstanding share and performance share awards granted under the EOP

	Number of shares 2017	Weighted average grant date fair value (CHF)	Number of shares 2016	Weighted average grant date fair value (CHF)
Outstanding, at the beginning of the year	512,185	16	427,443	18
Shares awarded during the year	117,082	14	199,755	13
Distributions during the year	(212,984)	16	(115,014)	18
Forfeited during the year	(11,563)	14	0	0
Outstanding, at the end of the year	404,720	14	512,185	16
<i>of which: shares vested for accounting purposes</i>	<i>132,117</i>		<i>189,953</i>	

The total carrying amount of the liability related to cash-settled share-based awards as of 31 December 2017 and 31 December 2016 was CHF 5 million and CHF 7 million, respectively.

### d) Valuation

#### Share awards

UBS AG measures compensation expense based on the average market price of the UBS Group AG share on the grant date as quoted on the SIX Swiss Exchange, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable. The fair value of the share awards subject to post-vesting sale and hedge restrictions

is discounted on the basis of the duration of the post-vesting restriction and is referenced to the cost of purchasing an at-the-money European put option for the term of the transfer restriction. The grant date fair value of notional shares without dividend entitlements also includes a deduction for the present value of future expected dividends to be paid between the grant date and distribution.

## Note 28 Interests in subsidiaries and other entities

### a) Interests in subsidiaries

UBS AG defines its significant subsidiaries as those entities that, either individually or in aggregate, contribute significantly to UBS AG's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to UBS AG's total assets and profit or loss before tax, in accordance with the requirements set by IFRS 12, Swiss regulations and the rules of the US Securities and Exchange Commission (SEC).

#### Individually significant subsidiaries

The table below lists UBS AG's individually significant subsidiaries as of 31 December 2017. Unless otherwise stated,

the subsidiaries listed below have share capital consisting solely of ordinary shares that are held fully by UBS AG, and the proportion of ownership interest held is equal to the voting rights held by UBS AG.

The country where the respective registered office is located is also the principal place of business. UBS AG operates through a global network of branches and a significant proportion of its business activity is conducted outside Switzerland in the UK, US, Singapore, Hong Kong and other countries. UBS Europe SE has branches and offices in a number of EU member states, including Germany, Italy, Luxembourg, Spain and Austria.

#### Individually significant subsidiaries as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD 2,250.0 <sup>1</sup>	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF 43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD 0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR 446.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP 226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD 1,283.1 <sup>2</sup>	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF 10.0	100.0

<sup>1</sup> Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. <sup>2</sup> Comprised of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

## Note 28 Interests in subsidiaries and other entities (continued)

### Other subsidiaries

The table below lists other subsidiaries of UBS AG that are not individually significant but that contribute to UBS AG's total assets and aggregated profit before tax thresholds and are thereby disclosed in accordance with the requirements set by the SEC.

#### Other subsidiaries as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Inc.	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD 0.0	100.0
UBS Asset Management (Australia) Ltd	Sydney, Australia	Asset Management	AUD 20.1 <sup>1</sup>	100.0
UBS Asset Management (Deutschland) GmbH	Frankfurt, Germany	Asset Management	EUR 7.7	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong, Hong Kong	Asset Management	HKD 206.0	100.0
UBS Asset Management (Japan) Ltd	Tokyo, Japan	Asset Management	JPY 2,200.0	100.0
UBS Asset Management (Singapore) Ltd	Singapore, Singapore	Asset Management	SGD 4.0	100.0
UBS Asset Management (UK) Ltd	London, United Kingdom	Asset Management	GBP 125.0	100.0
UBS Business Solutions US LLC	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Card Center AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF 0.1	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS (France) SA.	Paris, France	Wealth Management	EUR 133.0	100.0
UBS Fund Advisor, L.L.C.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Fund Management (Luxembourg) S.A.	Luxembourg, Luxembourg	Asset Management	EUR 13.0	100.0
UBS Fund Management (Switzerland) AG	Basel, Switzerland	Asset Management	CHF 1.0	100.0
UBS Hedge Fund Solutions LLC	Wilmington, Delaware, USA	Asset Management	USD 0.1	100.0
UBS (Monaco) S.A.	Monte Carlo, Monaco	Wealth Management	EUR 49.2	100.0
UBS O'Connor LLC	Dover, Delaware, USA	Asset Management	USD 1.0	100.0
UBS Real Estate Securities Inc.	Wilmington, Delaware, USA	Investment Bank	USD 0.0	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD 9.0	100.0
UBS Securities (Thailand) Ltd	Bangkok, Thailand	Investment Bank	THB 500.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD 0.3 <sup>1</sup>	100.0
UBS Securities India Private Limited	Mumbai, India	Investment Bank	INR 140.0	100.0
UBS Securities Japan Co., Ltd.	Tokyo, Japan	Investment Bank	JPY 32,100.0	100.0
UBS Securities Pte. Ltd.	Singapore, Singapore	Investment Bank	SGD 420.4	100.0
UBS South Africa (Proprietary) Limited	Sandton, South Africa	Investment Bank	ZAR 0.0	100.0
UBS UK Properties Limited	London, United Kingdom	Corporate Center	GBP 132.0	100.0

<sup>1</sup> Includes a nominal amount relating to redeemable preference shares.

## Note 28 Interests in subsidiaries and other entities (continued)

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### Changes in consolidation scope

In 2017, no significant subsidiaries were added to or removed from the scope of consolidation as a result of acquisitions or disposals.

### Non-controlling interests

As of 31 December 2017 and 31 December 2016, non-controlling interests were not material to UBS AG.

### Consolidated structured entities

UBS AG consolidates a structured entity (SE) if it has power over the relevant activities of the entity, exposure to variable returns and the ability to use its power to affect its returns. Consolidated SEs include certain investment funds, securitization vehicles and client investment vehicles. UBS AG has no individually significant subsidiaries that are SEs.

Investment fund SEs are generally consolidated when UBS AG's aggregate exposure combined with its decision-making rights indicate the ability to use such power in a principal capacity. Typically, UBS AG will have decision-making rights as fund manager, earning a management fee, and will provide seed capital at the inception of the fund or hold a significant

percentage of the fund units. Where other investors do not have the substantive ability to remove UBS as decision maker, UBS AG is deemed to have control and therefore consolidates the fund.

Securitization SEs are generally consolidated when UBS AG holds a significant percentage of the asset-backed securities issued by the SE and has the power to remove without cause the servicer of the asset portfolio.

Client investment SEs are generally consolidated when UBS AG has a substantive liquidation right over the SE or a decision right over the assets held by the SE and has exposure to variable returns through derivatives traded with the SE or holding notes issued by the SE.

In 2017 and 2016, UBS AG has not entered into any contractual obligation that could require UBS AG to provide financial support to consolidated SEs. In addition, UBS AG did not provide support, financial or otherwise, to a consolidated SE when UBS AG was not contractually obligated to do so, nor has UBS AG an intention to do so in the future. Further, UBS AG did not provide support, financial or otherwise, to a previously unconsolidated SE that resulted in UBS AG controlling the SE during the reporting period.

## Note 28 Interests in subsidiaries and other entities (continued)

### b) Interests in associates and joint ventures

As of 31 December 2017 and 2016, no associate or joint venture was individually material to UBS AG. In addition, there were no significant restrictions on the ability of associates or joint ventures to transfer funds to UBS AG or its subsidiaries in

the form of cash dividends or to repay loans or advances made. There were no quoted market prices for any associates or joint ventures of UBS AG.

#### Investments in associates and joint ventures

CHF million	31.12.17	31.12.16
Carrying amount at the beginning of the year	963	954
Additions	3	3
Disposals	0	(2)
Share of comprehensive income	98	82
<i>of which: share of net profit<sup>1</sup></i>	75	106
<i>of which: share of other comprehensive income<sup>2</sup></i>	23	(24)
Dividends received	(51)	(50)
Impairment	(7)	0
Foreign currency translation	12	(23)
<b>Carrying amount at the end of the year</b>	<b>1,018</b>	<b>963</b>
<i>of which: associates</i>	<i>989</i>	<i>934</i>
<i>of which: UBS Securities Co. Limited, Beijing<sup>3</sup></i>	<i>401</i>	<i>392</i>
<i>of which: SIX Group AG, Zurich<sup>4</sup></i>	<i>464</i>	<i>426</i>
<i>of which: other associates</i>	<i>124</i>	<i>116</i>
<i>of which: joint ventures</i>	<i>29</i>	<i>29</i>

<sup>1</sup> For 2017, consists of CHF 60 million from associates and CHF 15 million from joint ventures. For 2016, consists of CHF 94 million from associates and CHF 12 million from joint ventures. <sup>2</sup> For 2017, consists of CHF 24 million from associates and negative CHF 1 million from joint ventures. For 2016, consists of negative CHF 25 million from associates and CHF 0 million from joint ventures. <sup>3</sup> UBS AG's equity interest amounts to 24.99%. <sup>4</sup> UBS AG's equity interest amounts to 17.31%. UBS AG is represented on the Board of Directors.

## Note 28 Interests in subsidiaries and other entities (continued)

### c) Interests in unconsolidated structured entities

During 2017, UBS AG sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles as well as certain investment funds, which UBS did not consolidate as of 31 December 2017 because it did not control these entities.

The table below presents UBS AG's interests in and maximum exposure to loss from unconsolidated SEs as well as the total assets held by the SEs in which UBS had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying value of UBS's interest as of year-end has been disclosed.

#### Interests in unconsolidated structured entities

<i>CHF million, except where indicated</i>	31.12.17				Maximum exposure to loss <sup>1</sup>
	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	363	308	6,143	6,815	6,815
Positive replacement values	21	68	22	111	111
Loans	0	0	97	97	97
Financial assets designated at fair value	84	66 <sup>2</sup>	0	150	1,675
Financial assets available for sale	0	3,865	45	3,910	3,910
Other assets	291	29 <sup>2</sup>	0	320	1,407
<b>Total assets</b>	<b>760<sup>3</sup></b>	<b>4,337</b>	<b>6,307</b>	<b>11,403</b>	
Negative replacement values	20 <sup>4</sup>	53	203	276	14
<b>Total liabilities</b>	<b>20</b>	<b>53</b>	<b>203</b>	<b>276</b>	
<b>Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)</b>	<b>57<sup>5</sup></b>	<b>78<sup>6</sup></b>	<b>412<sup>7</sup></b>		

<i>CHF million, except where indicated</i>	31.12.16				Maximum exposure to loss <sup>1</sup>
	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	634	394	6,215	7,243	7,243
Positive replacement values	40	76	101	217	217
Loans	0	0	79	79	79
Financial assets designated at fair value	103	83 <sup>2</sup>	0	186	1,765
Financial assets available for sale	0	3,381	58	3,439	3,439
Other assets	289	37 <sup>2</sup>	0	327	1,490
<b>Total assets</b>	<b>1,066<sup>3</sup></b>	<b>3,971</b>	<b>6,454</b>	<b>11,491</b>	
Negative replacement values	33 <sup>4</sup>	346	67	446	90
<b>Total liabilities</b>	<b>33</b>	<b>346</b>	<b>67</b>	<b>446</b>	
<b>Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)</b>	<b>72<sup>5</sup></b>	<b>102<sup>6</sup></b>	<b>334<sup>7</sup></b>		

<sup>1</sup> For purposes of this disclosure, maximum exposure to loss amounts do not consider the risk-reducing effects of collateral or other credit enhancements. <sup>2</sup> Represents the carrying value of loan commitments, both designated at fair value and held at amortized cost. The maximum exposure to loss for these instruments is equal to the notional amount. <sup>3</sup> As of 31 December 2017, CHF 0.7 billion of the CHF 0.8 billion (31 December 2016: CHF 1.0 billion of the CHF 1.1 billion) was held in Corporate Center – Non-core and Legacy Portfolio. <sup>4</sup> Comprised of credit default swap (CDS) liabilities and other swap liabilities. The maximum exposure to loss for CDS is equal to the sum of the negative carrying value and the notional amount. For other swap liabilities, no maximum exposure to loss is reported. <sup>5</sup> Represents principal amount outstanding. <sup>6</sup> Represents the market value of total assets. <sup>7</sup> Represents the net asset value of the investment funds sponsored by UBS and the carrying value of UBS's interests in the investment funds not sponsored by UBS.

## Note 28 Interests in subsidiaries and other entities (continued)

UBS AG retains or purchases interests in unconsolidated SEs in the form of direct investments, financing, guarantees, letters of credit, derivatives and through management contracts.

UBS AG's maximum exposure to loss is generally equal to the carrying value of UBS AG's interest in the SE, with the exception of guarantees, letters of credit and credit derivatives, for which the contract's notional amount, adjusted for losses already incurred, represents the maximum loss that UBS AG is exposed to. In addition, the current fair value of derivative swap instruments with a positive replacement value only, such as total return swaps, is presented as the maximum exposure to loss. Risk exposure for these swap instruments could change over time with market movements.

The maximum exposure to loss disclosed in the table on the previous page does not reflect UBS AG's risk management activities, including effects from financial instruments that may be used to economically hedge the risks inherent in the unconsolidated SE or the risk-reducing effects of collateral or other credit enhancements.

In 2017 and 2016, UBS AG did not provide support, financial or otherwise, to an unconsolidated SE when not contractually obligated to do so, nor has UBS AG an intention to do so in the future.

In 2017 and 2016, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in net trading income, which have generally been hedged with other financial instruments, as well as fee and commission income received from UBS-sponsored funds.

### *Interests in securitization vehicles*

As of 31 December 2017 and 31 December 2016, UBS AG held interests, both retained and acquired, in various securitization vehicles, a majority of which are held within Corporate Center – Non-core and Legacy Portfolio. The Investment Bank also retained interests in securitization vehicles related to financing, underwriting, secondary market and derivative trading activities.

In some cases UBS AG may be required to absorb losses from an unconsolidated SE before other parties because UBS AG's interest is subordinated to others in the ownership structure. An overview of UBS AG's interests in unconsolidated securitization vehicles and the relative ranking and external credit rating of those interests is presented in the table on the following pages.

→ **Refer to Note 1a item 1 for more information on UBS AG's accounting policies regarding consolidation and sponsorship of securitization vehicles and other structured entities**

### *Interests in client vehicles*

As of 31 December 2017 and 31 December 2016, UBS AG retained interests in client vehicles sponsored by UBS and third parties that relate to financing and derivative activities, and to hedge structured product offerings. Included within these investments are securities guaranteed by US government agencies.

### *Interests in investment funds*

UBS AG holds interests in a number of investment funds, primarily resulting from seed investments or to hedge structured product offerings. In addition to the interests disclosed in the table on the previous page, UBS AG manages the assets of various pooled investment funds and receives fees that are based, in whole or part, on the net asset value of the fund and / or the performance of the fund. The specific fee structure is determined on the basis of various market factors and considers the nature of the fund, the jurisdiction of incorporation as well as fee schedules negotiated with clients. These fee contracts represent an interest in the fund as they align UBS AG's exposure with investors, providing a variable return that is based on the performance of the entity. Depending on the structure of the fund, these fees may be collected directly from the fund assets and / or from the investors. Any amounts due are collected on a regular basis and are generally backed by the assets of the fund. UBS AG did not have any material exposure to loss from these interests as of 31 December 2017 or as of 31 December 2016.

## Note 28 Interests in subsidiaries and other entities (continued)

### Interests in unconsolidated securitization vehicles<sup>1</sup>

	31.12.17				
	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities <sup>2</sup>	Re-securitization <sup>3</sup>	Total
<i>CHF million, except where indicated</i>					
<b>Sponsored by UBS</b>					
Interests in senior tranches	84	24	0	10	118
<i>of which: rated investment grade</i>	0	24			24
<i>of which: rated sub-investment grade</i>	84				84
<i>of which: defaulted</i>				10	10
Interests in junior tranches	0	9	0	0	9
<i>of which: rated investment grade</i>		9			9
<b>Total</b>	<b>84</b>	<b>32</b>	<b>0</b>	<b>10</b>	<b>126</b>
<i>of which: Trading portfolio assets</i>	0	32	0	10	43
<i>of which: Financial assets designated at fair value</i>	84	0	0	0	84
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>1</b>	<b>12</b>
<b>Not sponsored by UBS</b>					
Interests in senior tranches	75	6	165	64	311
<i>of which: rated investment grade</i>	75	6	165	64	311
Interests in mezzanine tranches	9	1	0	0	9
<i>of which: rated investment grade</i>		1			1
<i>of which: defaulted</i>	9				9
Interests in junior tranches	1	0	0	0	1
<i>of which: rated sub-investment grade</i>	1				1
Tranche information not available	0	0	0	0	0
<i>of which: rated investment grade</i>	0				0
<i>of which: not rated</i>	0				0
<b>Total</b>	<b>85</b>	<b>7</b>	<b>165</b>	<b>64</b>	<b>321</b>
<i>of which: Trading portfolio assets</i>	85	7	165	64	321
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	<b>18</b>	<b>5</b>	<b>20</b>	<b>0</b>	<b>43</b>

<sup>1</sup> This table excludes receivables and derivative transactions with securitization vehicles. <sup>2</sup> Includes credit card, auto and student loan structures. <sup>3</sup> Includes collateralized debt obligations.



## Note 28 Interests in subsidiaries and other entities (continued)

### Interests in unconsolidated securitization vehicles (continued)<sup>1</sup>

	31.12.16				
<i>CHF million, except where indicated</i>	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities <sup>2</sup>	Re-securitization <sup>3</sup>	Total
<b>Sponsored by UBS</b>					
Interests in senior tranches	103	34	0	14	151
<i>of which: rated investment grade</i>	0	34			34
<i>of which: rated sub-investment grade</i>	103				103
<i>of which: defaulted</i>				14	14
Interests in mezzanine tranches	1	0	0	0	1
<i>of which: rated sub-investment grade</i>	1				1
<b>Total</b>	104	34	0	14	152
<i>of which: Trading portfolio assets</i>	1	34	0	14	49
<i>of which: Financial assets designated at fair value</i>	103	0	0	0	103
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	2	13	0	1	16
<b>Not sponsored by UBS</b>					
Interests in senior tranches	165	4	241	125	535
<i>of which: rated investment grade</i>	165	4	241	125	535
Interests in mezzanine tranches	32	0	0	0	32
<i>of which: rated investment grade</i>	29				29
<i>of which: defaulted</i>	3				3
Interests in junior tranches	18	0	0	0	18
<i>of which: rated investment grade</i>	17				17
<i>of which: rated sub-investment grade</i>	1				1
<b>Total</b>	215	4	241	125	585
<i>of which: Trading portfolio assets</i>	215	4	241	125	585
<b>Total assets held by the vehicles in which UBS had an interest (CHF billion)</b>	41	8	5	1	56

<sup>1</sup> This table excludes receivables and derivative transactions with securitization vehicles. <sup>2</sup> Includes credit card, auto and student loan structures. <sup>3</sup> Includes collateralized debt obligations.

## Note 28 Interests in subsidiaries and other entities (continued)

### *Sponsored unconsolidated structured entities in which UBS did not have an interest*

For several sponsored SEs, no interest was held by UBS AG at year-end. However, during the respective reporting period UBS AG transferred assets, provided services and held instruments that did not qualify as an interest in these sponsored SEs, and accordingly earned income or incurred expenses from these entities. The table below presents the income earned and expenses incurred directly from these entities during the year as well as corresponding asset information. The table does not include income earned and expenses incurred from risk management activities, including income and expenses from financial instruments used to economically hedge instruments transacted with the unconsolidated SEs.

The majority of the fee income arose from investment funds that are sponsored and administrated by UBS AG, but managed by third parties. As UBS AG does not provide any active management services, UBS was not exposed to risk from the performance of these entities and was therefore deemed not to have an interest in them. In certain structures, the fees

receivable may be collected directly from the investors and have therefore not been included in the table below.

UBS AG also recorded net trading income from mark-to-market movements arising primarily from derivatives, such as interest rate and currency swaps as well as credit derivatives, through which UBS AG purchases protection, and financial liabilities designated at fair value, which do not qualify as interests because UBS AG does not absorb variability from the performance of the entity. Total income reported does not reflect economic hedges or other mitigating effects from UBS AG's risk management activities.

During 2017, UBS and third parties transferred assets totaling CHF 17 billion (2016: CHF 13 billion) into sponsored securitization and client vehicles created in 2017. For sponsored investment funds, transfers arose during the period as investors invested and redeemed positions, thereby changing the overall size of the funds, which, when combined with market movements, resulted in a total closing net asset value of CHF 15 billion (31 December 2016: CHF 14 billion).

### Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end<sup>1</sup>

	As of or for the year ended			
	31.12.17			
	Securitization vehicles	Client vehicles	Investment funds	Total
<i>CHF million, except where indicated</i>				
Net interest income	2	(9)	0	(7)
Net fee and commission income	0	0	40	40
Net trading income	(8)	(49)	2	(55)
<b>Total income</b>	<b>(6)</b>	<b>(58)</b>	<b>43</b>	<b>(21)</b>
<b>Asset information (CHF billion)</b>	<b>10<sup>2</sup></b>	<b>7<sup>3</sup></b>	<b>15<sup>4</sup></b>	

	As of or for the year ended			
	31.12.16			
	Securitization vehicles	Client vehicles	Investment funds	Total
<i>CHF million, except where indicated</i>				
Net interest income	3	(6)	0	(3)
Net fee and commission income	0	0	53	53
Net trading income	2	(158)	29	(128)
<b>Total income</b>	<b>4</b>	<b>(165)</b>	<b>82</b>	<b>(78)</b>
<b>Asset information (CHF billion)</b>	<b>7<sup>2</sup></b>	<b>6<sup>3</sup></b>	<b>14<sup>4</sup></b>	

<sup>1</sup> These tables exclude profit attributable to preferred noteholders of CHF 72 million for the year ended 31 December 2017 and CHF 78 million for the year ended 31 December 2016. <sup>2</sup> Represents the amount of assets transferred to the respective securitization vehicles. Of the total amount transferred, CHF 2 billion was transferred by UBS (31 December 2016: CHF 2 billion) and CHF 8 billion was transferred by third parties (31 December 2016: CHF 5 billion). <sup>3</sup> Represents total assets transferred to the respective client vehicles. Of the total amount transferred, CHF 6 billion was transferred by UBS (31 December 2016: CHF 5 billion) and CHF 1 billion was transferred by third parties (31 December 2016: CHF 1 billion). <sup>4</sup> Represents the total net asset value of the respective investment funds.

## Note 29 Business combinations

In 2017 and 2016, UBS AG did not complete any significant business combinations.

## Note 30 Changes in organization and disposals

### Measures to improve the resolvability of the UBS Group

In December 2014, UBS Group AG became the holding company of the UBS Group. In 2015, UBS transferred its Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG and implemented a more self-sufficient business and operating model for UBS Limited.

UBS Business Solutions AG was established in 2015 as a direct subsidiary of UBS Group AG to act as the UBS Group service company. In the second half of 2015, UBS AG transferred the ownership of the majority of its existing service subsidiaries outside the US to UBS Business Solutions AG, and in 2017 shared services functions in Switzerland and the UK were transferred from UBS AG to UBS Business Solutions AG. UBS AG also completed the transfer of the shared services functions in the US to its US service company, UBS Business Solutions US LLC, a wholly owned subsidiary of UBS Americas Holding LLC.

In addition, UBS AG transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, UBS AG merged its Wealth Management subsidiaries in Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain into UBS Deutschland AG, which was renamed to UBS Europe SE, to establish UBS AG's new European legal entity, which is headquartered in Frankfurt, Germany.

### Transfers of shared services functions to UBS Business Solutions AG

In 2017, UBS transferred shared services functions in Switzerland and the UK from UBS AG to UBS Business Solutions AG. The transfer in Switzerland to UBS Business Solutions AG was executed in the second quarter of 2017. For UK shared services, a similar transfer to the UK branch of UBS Business Solutions AG was completed in the fourth quarter of 2017.

The transfer in Switzerland was effected by a distribution of the shares of an interim shared services subsidiary of UBS AG to UBS Group AG through a dividend in kind, and the merger of the subsidiary with the previously established UBS Business Solutions AG. The transfer resulted in a CHF 307 million reduction of net assets and of share premium within equity attributable to shareholders.

The transferred functions include Group Technology, Group Operations, Group Corporate Services and most other shared services functions. As a consequence, UBS AG no longer incurs the respective direct costs, no longer charges other Group entities for underlying services and no longer earns a related markup, but rather receives a charge including a markup from a service company for its own consumption of services provided by

the service company. UBS AG retained the vast majority of its real estate portfolio and selected other Corporate Center – Services functions and continues to charge UBS Business Solutions AG for services provided to it, earning a markup.

The new shared services model resulted in a reduction of *Operating profit before tax* for UBS AG consolidated of approximately CHF 0.1 billion for the year 2017. This amount includes net increases in *Other income* of approximately CHF 0.3 billion and *General and administrative expenses* of approximately CHF 1.7 billion and net decreases in *Personnel expenses* of approximately CHF 1.2 billion and *Depreciation and impairment of property, equipment and software* of approximately CHF 0.1 billion.

### Sale of subsidiaries and businesses

In the fourth quarter of 2017, UBS AG completed the sale of Asset Management's fund administration servicing units in Luxembourg and Switzerland to Northern Trust, resulting in a pre-tax gain on sale of CHF 153 million.

In the second quarter of 2017, UBS AG completed the sale of a life insurance subsidiary within Wealth Management. A loss on sale of CHF 23 million was recognized in 2016 relating to this transaction. Prior to completion of the sale, the assets and liabilities of this business were presented as a disposal group held for sale within *Other assets* and *Other liabilities* (31 December 2016: CHF 5.1 billion and CHF 5.2 billion, respectively).

In 2015, UBS AG sold its Alternative Fund Services (AFS) business to Mitsubishi UFJ Financial Group Investor Services. Upon completion of the sale, UBS AG recognized a gain on sale of CHF 56 million and reclassified an associated net foreign currency translation gain of CHF 119 million from *Other comprehensive income* to the income statement. Also during 2015, UBS AG completed the sale of certain subsidiaries and businesses within Wealth Management, which resulted in the recognition of a combined net gain of CHF 169 million.

### Restructuring expenses

Restructuring expenses arise from programs that materially change either the scope of business that UBS AG engages in or the manner in which such business is conducted. Restructuring expenses are necessary to effect such programs and include items such as severance and other personnel-related expenses, duplicate headcount costs, impairment and accelerated depreciation of assets, contract termination costs, consulting fees, and related infrastructure and system costs. These costs are presented in the income statement according to the underlying nature of the expense.

### Note 30 Changes in organization and disposals (continued)

#### Net restructuring expenses by business division and Corporate Center unit

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Wealth Management	463	447	323
Wealth Management Americas	113	139	137
Personal & Corporate Banking	103	117	101
Asset Management	100	100	82
Investment Bank	359	577	396
Corporate Center	49	62	194
of which: Services	39	41	138
of which: Group ALM	4	0	0
of which: Non-core and Legacy Portfolio	6	21	56
<b>Total net restructuring expenses</b>	<b>1,188</b>	<b>1,442</b>	<b>1,233</b>
of which: personnel expenses	362	731	458
of which: general and administrative expenses	818	700	760
of which: depreciation and impairment of property, equipment and software	7	11	12
of which: amortization and impairment of intangible assets	0	0	2

#### Net restructuring expenses by personnel expense category

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Salaries	213	422	311
Variable compensation – performance awards	22	101	38
Variable compensation – other	80	208	108
Contractors	48	56	46
Social security	6	8	5
Pension and other post-employment benefit plans	(15)	(76)	(65)
Other personnel expenses	8	12	15
<b>Total net restructuring expenses: personnel expenses</b>	<b>362</b>	<b>731</b>	<b>458</b>

#### Net restructuring expenses by general and administrative expense category

CHF million	For the year ended		
	31.12.17	31.12.16	31.12.15
Occupancy	75	123	109
Rent and maintenance of IT and other equipment	36	93	31
Communication and market data services	1	1	0
Administration	397	28	7
Marketing and public relations	1	0	0
Travel and entertainment	8	12	16
Professional fees	143	162	187
Outsourcing of IT and other services	166	287	316
Other <sup>1</sup>	(8)	(5)	95
<b>Total net restructuring expenses: general and administrative expenses</b>	<b>818</b>	<b>700</b>	<b>760</b>

<sup>1</sup> Mainly comprised of onerous real estate lease contracts.

## Note 31 Operating leases and finance leases

Information on lease contracts classified as operating leases where UBS AG is the lessee is provided in Note 31a and information on finance leases where UBS AG acts as a lessor is provided in Note 31b.

### a) Operating lease commitments

As of 31 December 2017, UBS AG was obligated under a number of non-cancelable operating leases for premises and equipment used primarily for banking purposes. The significant premises leases usually include renewal options and escalation clauses in line with general office rental market conditions, as

well as rent adjustments based on price indices. However, the lease agreements do not contain contingent rent payment clauses and purchase options, nor do they impose any restrictions on UBS AG's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

<i>CHF million</i>	<b>31.12.17</b>
<b>Expenses for operating leases to be recognized in:</b>	
2018	652
2019	588
2020	506
2021	422
2022	375
2023 and thereafter	1,984
Subtotal commitments for minimum payments under operating leases	4,526
Less: Sublease rental income commitments	262
<b>Net commitments for minimum payments under operating leases</b>	<b>4,265</b>

<i>CHF million</i>	<b>31.12.17</b>	31.12.16	31.12.15
<b>Gross operating lease expense recognized in the income statement</b>	<b>684</b>	737	741
Sublease rental income	67	78	70
<b>Net operating lease expense recognized in the income statement</b>	<b>617</b>	659	671

### b) Finance lease receivables

UBS AG leases a variety of assets to third parties under finance leases, such as commercial vehicles, production lines, medical equipment, construction equipment and aircraft. At the end of the respective lease term, assets may be sold to third parties or further leased. Lessees may participate in any sales proceeds achieved. Lease expenses cover the cost of the assets less their residual value as well as financing costs.

As of 31 December 2017, unguaranteed residual values of CHF 158 million had been accrued, and the accumulated allowance for uncollectible minimum lease payments receivable amounted to CHF 10 million. No contingent rents were received in 2017.

#### Lease receivables

<i>CHF million</i>	<b>31.12.17</b>		
	<b>Total minimum lease payments</b>	<b>Unearned finance income</b>	<b>Present value</b>
2018	333	22	311
2019–2022	684	36	648
Thereafter	112	3	110
<b>Total</b>	<b>1,129</b>	<b>61</b>	<b>1,069</b>

## Note 32 Related parties

UBS AG defines related parties as associates (entities that are significantly influenced by UBS), joint ventures (entities in which UBS shares control with another party), post-employment benefit plans for UBS AG employees, key management personnel, close family members of key management personnel

and entities that are, directly or indirectly, controlled or jointly controlled by key management personnel or their close family members. Key management personnel is defined as members of the Board of Directors (BoD) and Executive Board (EB).

### a) Remuneration of key management personnel

The Chairman of the BoD has a specific management employment contract and receives pension benefits upon retirement. Total remuneration of the Chairman of the Board of Directors and all EB members is included in the table below.

#### Remuneration of key management personnel

CHF million	31.12.17	31.12.16	31.12.15
Base salaries and other cash payments <sup>1</sup>	23	24	21
Incentive awards – cash <sup>2</sup>	13	10	9
Annual incentive award under DCCP	20	20	20
Employer's contributions to retirement benefit plans	2	2	1
Benefits in kind, fringe benefits (at market value)	2	2	2
Equity-based compensation <sup>3</sup>	36	38	39
<b>Total</b>	<b>98</b>	<b>97</b>	<b>92</b>

<sup>1</sup> Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). <sup>2</sup> Includes immediate and deferred cash. <sup>3</sup> Expenses for shares granted are calculated at grant date of the respective award and allocated over the vesting period, generally for 5 years. Refer to Note 27 for more information. In 2017, 2016 and 2015, equity-based compensation was entirely comprised of EOP awards.

The independent members of the BoD do not have employment or service contracts with UBS AG, and thus are not entitled to benefits upon termination of their service on the BoD. Payments to these individuals for their services as external board members amounted to CHF 7.1 million in 2017, CHF 7.2 million in 2016 and CHF 6.7 million in 2015.

### b) Equity holdings of key management personnel

#### Equity holdings of key management personnel

	31.12.17	31.12.16
Number of stock options from equity participation plans held by non-independent members of the BoD and the EB members <sup>1</sup>	398,867	620,950
Number of shares held by members of the BoD, EB and parties closely linked to them <sup>2</sup>	3,709,539	3,267,911

<sup>1</sup> Refer to Note 27 for more information. <sup>2</sup> Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, 95,597 shares were held by close family members of key management personnel on 31 December 2017 and 31 December 2016. No shares were held by entities that are directly or indirectly controlled or jointly controlled by key management personnel or their close family members on

31 December 2017 and 31 December 2016. Refer to Note 27 for more information. As of 31 December 2017, no member of the BoD or EB was the beneficial owner of more than 1% of UBS Group AG's shares.

## Note 32 Related parties (continued)

### c) Loans, advances and mortgages to key management personnel

The non-independent members of the BoD and EB members are granted loans, fixed advances and mortgages in the ordinary course of business on substantially the same terms and conditions that are available to other employees, including interest rates and collateral, and neither involve more than the normal risk of collectibility nor contain any other unfavorable

features for the firm. Independent BoD members are granted loans and mortgages in the ordinary course of business at general market conditions.

Movements in the loan, advances and mortgage balances are as follows.

#### Loans, advances and mortgages to key management personnel<sup>1</sup>

<i>CHF million</i>	2017	2016
Balance at the beginning of the year	33	33
Additions	1	13
Reductions	(1)	(13)
Balance at the end of the year <sup>2</sup>	34	33

<sup>1</sup> All loans are secured loans. <sup>2</sup> Excludes unused uncommitted credit facilities for two EB members and one BoD member of CHF 5,196,294 as of 31 December 2017 and for one EB and one BoD member of CHF 2,684,498 as of 31 December 2016.

### d) Other related party transactions with entities controlled by key management personnel

In 2017 and 2016, UBS AG did not enter into transactions with entities that are directly or indirectly controlled or jointly controlled by UBS AG's key management personnel or their close family members and as of 31 December 2017, 31 December 2016 and 31 December 2015, there were no outstanding balances related to such transactions. Furthermore,

in 2017 and 2016, entities controlled by key management personnel did not sell any goods or provide any services to UBS AG, and therefore did not receive any fees from UBS AG. UBS AG also did not provide services to such entities in 2017 and 2016, and therefore also received no fees.

## Note 32 Related parties (continued)

### e) Transactions with associates and joint ventures

#### Loans to and outstanding receivables from associates and joint ventures

<i>CHF million</i>	2017	2016
Carrying value at the beginning of the year	472	476
Additions	82	4
Reductions	(3)	(8)
Carrying value at the end of the year	551	472
<i>of which: unsecured loans</i>	540	461

#### Other transactions with associates and joint ventures

<i>CHF million</i>	As of or for the year ended	
	31.12.17	31.12.16
Payments to associates and joint ventures for goods and services received	177	153
Fees received for services provided to associates and joint ventures	2	3
Commitments and contingent liabilities to associates and joint ventures	4	4

→ Refer to Note 28 for an overview of investments in associates and joint ventures

### f) Receivables and payables from / to UBS Group AG and other subsidiaries of UBS Group AG

<i>CHF million</i>	2017	2016
<b>Receivables</b>		
Loans	2,152	681
Trading portfolio assets	98	84
Other assets	113	35
<b>Payables</b>		
Due to customers <sup>1</sup>	38,150	26,527
Other liabilities	1,547	1,111

<sup>1</sup> Includes Group-internal funding obtained from UBS Group AG and UBS Group Funding (Switzerland) AG of CHF 35 billion as of 31 December 2017 (31 December 2016: CHF 25 billion).



## Note 33 Invested assets and net new money

### Invested assets

Invested assets include all client assets managed by or deposited with UBS AG for investment purposes. Invested assets include managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts and wealth management securities or brokerage accounts. All assets held for purely transactional purposes and custody-only assets, including corporate client assets held for cash management and transactional purposes, are excluded from invested assets as UBS AG only administers the assets and does not offer advice on how the assets should be invested. Also excluded are non-bankable assets (e.g., art collections) and deposits from third-party banks for funding or trading purposes.

Discretionary assets are defined as client assets that UBS AG decides how to invest. Other invested assets are those where the client ultimately decides how the assets are invested. When a single product is created in one business division and sold in another, it is counted in both the business division that manages the investment and the one that distributes it. This results in double counting within UBS AG total invested assets, as both business divisions are independently providing a service to their respective clients, and both add value and generate revenue.

### Net new money

Net new money in a reporting period is the amount of invested assets that are entrusted to UBS AG by new and existing clients, less those withdrawn by existing clients and clients who terminated their relationship with UBS AG.

Net new money is calculated using the direct method, under which inflows and outflows to / from invested assets are determined at the client level based on transactions. Interest and dividend income from invested assets are not counted as net new money inflows. Market and currency movements as well as fees, commissions and interest on loans charged are excluded from net new money, as are the effects resulting from any acquisition or divestment of a UBS AG subsidiary or business. Reclassifications between invested assets and custody-only assets as a result of a change in the service level delivered are generally treated as net new money flows; however, where such change in service level directly results from a new externally imposed regulation, the one-time net effect of the implementation is reported as an asset reclassification without net new money impact.

The Investment Bank does not track invested assets and net new money. However, when a client is transferred from the Investment Bank to another business division, this produces net new money even though client assets were already with UBS AG. There were no such transfers between the Investment Bank and other business divisions in 2017 and 2016.

### Invested assets and net new money

	For the year ended	
CHF billion	31.12.17	31.12.16
Fund assets managed by UBS	330	275
Discretionary assets	1,025	886
Other invested assets <sup>1</sup>	1,824	1,649
<b>Total invested assets<sup>1,2</sup></b>	<b>3,179</b>	<b>2,810</b>
<i>of which: double counts</i>	<i>204</i>	<i>176</i>
<b>Net new money<sup>2</sup></b>	<b>104</b>	<b>27</b>

<sup>1</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 were corrected by CHF 12 billion. <sup>2</sup> Includes double counts.

### Development of invested assets

	For the year ended	
CHF billion	31.12.17	31.12.16
Total invested assets at the beginning of the year <sup>1,2</sup>	2,810	2,678
Net new money	104	27
Market movements <sup>3</sup>	313	98
Foreign currency translation	(45)	21
Other effects	(3)	(14)
<i>of which: acquisitions / (divestments)</i>	<i>4</i>	<i>(14)</i>
<b>Total invested assets at the end of the year<sup>1,2</sup></b>	<b>3,179</b>	<b>2,810</b>

<sup>1</sup> Includes double counts. <sup>2</sup> Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively. <sup>3</sup> Includes interest and dividend income.

## Note 34 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of foreign operations into Swiss francs.

	Spot rate		Average rate <sup>1</sup>		
	As of		For the year ended		
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.15
1 USD	0.97	1.02	0.98	0.99	0.97
1 EUR	1.17	1.07	1.12	1.09	1.06
1 GBP	1.32	1.26	1.28	1.32	1.47
100 JPY	0.86	0.87	0.88	0.91	0.80

<sup>1</sup> Monthly income statement items of foreign operations with a functional currency other than the Swiss franc are translated with month-end rates into Swiss francs. Disclosed average rates for a year represent an average of 12 month-end rates, weighted according to the income and expense volumes of all foreign operations with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for UBS AG.

## Note 35 Events after the reporting period

### Events subsequent to the publication of the unaudited fourth quarter 2017 report

The 2017 results and the balance sheet as of 31 December 2017 differ from those presented in the unaudited fourth quarter 2017 report published on 22 January 2018 as a result of events adjusted for after the balance sheet date. Provisions for litigation, regulatory and similar matters increased, which reduced 2017 operating profit before tax by CHF 141 million and 2017 net profit attributable to shareholders by CHF 112 million.

### Integration of Wealth Management and Wealth Management Americas into a single business division

Effective 1 February 2018, UBS is integrating its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division. The firm will report the results for Global Wealth Management beginning with the first quarter of 2018.

→ Refer to Note 1c for more information on the change in segment reporting

### Changes to the Pension Fund of UBS in Switzerland

As a result of the effects of continuing low and in some cases negative interest rates, diminished investment return expectations and increasing life expectancy, the Pension Fund of UBS in Switzerland and UBS have agreed measures that will take effect from the start of 2019 to support the long-term financial stability of the Swiss pension fund. As a result, the conversion

rate will be lowered, the regular retirement age and employee contributions will be increased, and savings contributions will start earlier. These measures will have no effect on current pensioners of UBS.

To mitigate the effects of the reduction of the conversion rate on future pensions, UBS AG will make a payment to employees' retirement assets in the Swiss pension fund of up to CHF 450 million in three installments in 2020, 2021 and 2022.

In accordance with International Financial Reporting Standards (IFRS), these measures, including the portion of the payment to be made by UBS that is attributable to past service, will lead to a reduction in the pension obligation recognized by UBS AG, resulting in a pre-tax gain of CHF 123 million in the first quarter of 2018 with no overall effect on total equity and a reduced pension service cost starting from January 2018. The gain will be recognized as a reduction in personnel expense within the income statement across the business divisions and Corporate Center, with a corresponding effect in *Other comprehensive income*, as the Swiss pension plan is currently in a surplus situation that cannot be recognized due to the IFRS asset ceiling requirement. If the Swiss pension plan remains in an asset ceiling position, the annual payments adjusted for expected forfeitures are expected to reduce total equity by approximately CHF 130 million per year over the installment period, with no effect on the income statement.

→ Refer to Note 26 for more information on the Swiss pension plan and the asset ceiling effect

## Note 36 Main differences between IFRS and Swiss GAAP

The consolidated financial statements of UBS AG are prepared in accordance with International Financial Reporting Standards (IFRS). The Swiss Financial Market Supervisory Authority (FINMA) requires financial groups that present their financial statements under IFRS to provide a narrative explanation of the main differences between IFRS and Swiss GAAP (FINMA Circular 2015 / 1 and the Banking Ordinance). Included in this Note are the significant differences in the recognition and measurement between IFRS and the provisions of the Banking Ordinance and the guidelines of FINMA governing true and fair view financial statement reporting pursuant to article 25 through article 42 of the Banking Ordinance.

### 1. Consolidation

Under IFRS, all entities that are controlled by the holding entity are consolidated.

Under Swiss GAAP, controlled entities that are deemed immaterial to UBS AG or that are held temporarily only are exempt from consolidation, but instead are recorded as participations accounted for under the equity method of accounting or as financial investments measured at the lower of cost or market value.

### 2. Financial assets available for sale

Under IFRS, financial assets available for sale are carried at fair value. Changes in fair value are recorded directly in equity until an asset is sold, collected or otherwise disposed of, or until an asset is determined to be impaired. At the time an available-for-sale asset is determined to be impaired, the cumulative unrealized loss previously recognized in equity is included in net profit or loss for the respective period. On disposal of a financial asset available for sale, the cumulative unrealized gain or loss previously recognized in equity is reclassified to the income statement.

Under Swiss GAAP, classification and measurement of financial assets designated as available for sale depend on the nature of the asset. Equity instruments with no permanent holding intent, as well as debt instruments, are classified as *Financial investments* and measured at the lower of (amortized) cost or market value. Market value adjustments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded in the income statement as

*Other income from ordinary activities*. Equity instruments with a permanent holding intent are classified as participations in *Non-consolidated investments in subsidiaries and other participations* and measured at cost less impairment. Impairment losses are recorded in the income statement as *Impairment of investments in non-consolidated subsidiaries and other participations*. Reversals of impairments up to the original cost amount as well as realized gains or losses upon disposal of the investment are recorded as *Extraordinary income / Extraordinary expenses* in the income statement.

### 3. Hedge accounting

Under IFRS, when cash flow hedge accounting is applied, the fair value gain or loss on the effective portion of the derivative designated as a cash flow hedge is recognized in equity. When fair value hedge accounting is applied, the fair value gains or losses of the derivative and the hedged item are recognized in the income statement.

Under Swiss GAAP, the effective portion of the fair value change of the derivative instrument designated as a cash flow or as fair value hedge is deferred on the balance sheet as *Other assets* or *Other liabilities*. The carrying value of the hedged item designated in fair value hedges is not adjusted for fair value changes attributable to the hedged risk.

### 4. Fair value option

Under IFRS, UBS AG applies the fair value option to certain financial assets and financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at fair value with changes in fair value reflected in *Net trading income*. The fair value option is applied primarily to structured debt instruments, certain non-structured debt instruments, high-quality liquid debt securities, structured reverse repurchase and repurchase agreements and securities borrowing agreements, certain structured and non-structured loans as well as loan commitments.

Under Swiss GAAP, the fair value option can only be applied to structured debt instruments that consist of a debt host contract and one or more embedded derivatives that do not relate to own equity. Furthermore, changes in fair value attributable to changes in unrealized own credit are not recognized.

## Note 36 Main differences between IFRS and Swiss GAAP (continued)

### 5. Goodwill and intangible assets

Under IFRS, goodwill acquired in a business combination is not amortized but tested annually for impairment. Intangible assets with an indefinite useful life are also not amortized but tested annually for impairment.

Under Swiss GAAP, goodwill and intangible assets with indefinite useful lives are amortized over a period not exceeding five years, unless a longer useful life, which may not exceed 10 years, can be justified.

### 6. Pension and other post-employment benefit plans

Swiss GAAP permits the use of IFRS or Swiss accounting standards for pension and other post-employment benefit plans, with the election made on a plan-by-plan basis.

UBS AG has elected to apply IFRS (IAS 19) for the non-Swiss defined benefit plans and Swiss GAAP (FER 16) for the Swiss pension plan in its standalone financial statements. The requirements of Swiss GAAP are better aligned with the specific nature of Swiss pension plans, which are hybrid in that they combine elements of defined contribution and defined benefit plans, but are treated as defined benefit plans under IFRS. Key differences between Swiss GAAP and IFRS include the treatment of dynamic elements, such as future salary increases and future interest credits on retirement savings, which are not considered under the static method used in accordance with Swiss GAAP. Also, the discount rate used to determine the defined benefit obligation in accordance with IFRS is based on the yield of high-quality corporate bonds of the market in the respective pension plan country. The discount rate used in accordance with Swiss GAAP, i.e., the technical interest rate, is determined by the Pension Foundation Board based on the expected returns of the Board's investment strategy.

For defined benefit plans, IFRS requires the full defined benefit obligation net of the plan assets to be recorded on the balance sheet, with changes resulting from remeasurements recognized directly in equity. However, for non-Swiss defined benefit plans for which IFRS accounting is elected, changes due to remeasurements are recognized in the income statement of UBS AG standalone under Swiss GAAP.

Swiss GAAP requires that employer contributions to the pension fund are recognized as personnel expenses in the income statement. Further, Swiss GAAP requires an assessment as to whether, based on the financial statements of the pension

fund prepared in accordance with Swiss accounting standards (FER 26), an economic benefit to, or obligation of, the employer arises from the pension fund and is recognized in the balance sheet when conditions are met. Conditions for recording a pension asset or liability would be met if, for example, an employer contribution reserve is available or the employer is required to contribute to the reduction of a pension deficit (on an FER 26 basis).

### 7. Netting of replacement values

Under IFRS, replacement values and related cash collateral are reported on a gross basis unless the restrictive IFRS netting requirements are met: i) existence of master netting agreements and related collateral arrangements that are unconditional and legally enforceable, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG and its counterparties, and ii) UBS AG's intention to either settle on a net basis or to realize the asset and settle the liability simultaneously.

Under Swiss GAAP, replacement values and related cash collateral are generally reported on a net basis, provided the master netting and the related collateral agreements are legally enforceable in the event of default, bankruptcy or insolvency of UBS AG's counterparties.

### 8. Negative interest

Under IFRS, negative interest income arising on a financial asset does not meet the definition of interest income and, therefore, negative interest on financial assets and negative interest on financial liabilities are presented within interest expense and interest income, respectively.

Under Swiss GAAP, negative interest on financial assets is presented within interest income and negative interest on financial liabilities is presented within interest expense.

### 9. Extraordinary income and expense

Certain non-recurring and non-operating income and expense items, such as realized gains or losses from the disposal of participations, fixed and intangible assets, as well as reversals of impairments of participations and fixed assets, are classified as extraordinary items under Swiss GAAP. This distinction is not available under IFRS. ▲

## Note 37 Supplemental guarantor information required under SEC regulations

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### Guarantee of PaineWebber securities

Prior to its acquisition by UBS in 2000, Paine Webber Group Inc. (PaineWebber) was an SEC registrant. Upon acquisition, PaineWebber was merged into UBS Americas Inc., a wholly owned subsidiary of UBS AG. Following the acquisition, UBS AG entered into a full and unconditional guarantee of the senior notes (Debt Securities) issued by PaineWebber. Under the guarantee, if UBS Americas Inc. fails to make any timely payment under the Debt Securities agreements, the holders of the Debt Securities or the Debt Securities trustee may demand payment from UBS AG without first proceeding against UBS Americas Inc.

As of 31 December 2017, CHF 1 million of these Debt Securities were outstanding. These remaining notes mature in 2018.

### Guarantee of other securities

As of 31 December 2017 and 31 December 2016, UBS Preferred Funding Trust IV and UBS Preferred Funding Trust V had no balances outstanding. These entities are presented in a separate column in supplemental guarantor information provided for prior periods in the following tables. Amounts presented in this column are eliminated in the *Elimination entries* column, as these entities were not consolidated by UBS AG because UBS AG did not absorb any variability from the performance of these entities.

### Joint liability of UBS Switzerland AG

In 2015, the Personal & Corporate Banking and Wealth Management businesses booked in Switzerland were transferred from UBS AG to UBS Switzerland AG through an asset transfer in accordance with the Swiss Merger Act. Under the terms of the asset transfer agreement, UBS Switzerland AG assumed joint liability for contractual obligations of UBS AG existing on the asset transfer date, including the existing guarantee of aforementioned PaineWebber and other securities. To reflect this joint liability, UBS Switzerland AG is presented in a separate column as a subsidiary co-guarantor.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated income statement

<i>CHF million</i>	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2017						
<b>Operating income</b>						
Interest income	8,632	3,917	2,732	1,742	(2,815)	14,208
Interest expense	(7,114)	(596)	(1,307)	(1,434)	2,724	(7,728)
Net interest income	1,518	3,321	1,425	308	(91)	6,480
Credit loss (expense) / recovery	(135)	(22)	(4)	(5)	39	(128)
Net interest income after credit loss expense	1,382	3,299	1,421	303	(53)	6,352
Net fee and commission income	1,564	3,966	8,281	3,449	(47)	17,214
Net trading income	3,325	901	457	220	71	4,974
Other income	4,303	167	419	3,439	(7,388)	939
<b>Total operating income</b>	<b>10,574</b>	<b>8,334</b>	<b>10,577</b>	<b>7,411</b>	<b>(7,417)</b>	<b>29,479</b>
<b>Operating expenses</b>						
Personnel expenses	4,409	2,020	6,312	1,932	0	14,673
General and administrative expenses	4,830	3,334	3,014	3,087	(5,455)	8,811
Depreciation and impairment of property, equipment and software	652	11	156	108	0	928
Amortization and impairment of intangible assets	8	0	51	11	0	70
<b>Total operating expenses</b>	<b>9,899</b>	<b>5,366</b>	<b>9,532</b>	<b>5,138</b>	<b>(5,455)</b>	<b>24,481</b>
<b>Operating profit / (loss) before tax</b>	<b>675</b>	<b>2,968</b>	<b>1,045</b>	<b>2,273</b>	<b>(1,962)</b>	<b>4,998</b>
Tax expense / (benefit)	448	616	2,800	213	(1)	4,077
Net profit / (loss)	227	2,351	(1,755)	2,059	(1,962)	921
Net profit / (loss) attributable to preferred noteholders	72	0	0	0	0	72
Net profit / (loss) attributable to non-controlling interests	0	0	0	4	0	4
<b>Net profit / (loss) attributable to shareholders</b>	<b>155</b>	<b>2,351</b>	<b>(1,755)</b>	<b>2,056</b>	<b>(1,962)</b>	<b>845</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated statement of comprehensive income

<i>CHF million</i>	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2017						
<b>Comprehensive income attributable to shareholders</b>						
Net profit / (loss)	155	2,351	(1,755)	2,056	(1,962)	845
<b>Other comprehensive income</b>						
<b>Other comprehensive income that may be reclassified to the income statement</b>						
Foreign currency translation, net of tax	(170)	0	(751)	426	(40)	(535)
Financial assets available for sale, net of tax	(6)	2	43	(31)	(93)	(86)
Cash flow hedges, net of tax	(465)	(157)	0	(1)	1	(621)
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>(641)</b>	<b>(156)</b>	<b>(709)</b>	<b>394</b>	<b>(132)</b>	<b>(1,242)</b>
<b>Other comprehensive income that will not be reclassified to the income statement</b>						
Defined benefit plans, net of tax	275	(22)	41	(14)	25	305
Own credit on financial liabilities designated at fair value, net of tax	(313)	0	0	0	0	(313)
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>(38)</b>	<b>(22)</b>	<b>41</b>	<b>(14)</b>	<b>25</b>	<b>(8)</b>
<b>Total other comprehensive income</b>	<b>(679)</b>	<b>(177)</b>	<b>(668)</b>	<b>380</b>	<b>(107)</b>	<b>(1,250)</b>
<b>Total comprehensive income attributable to shareholders</b>	<b>(524)</b>	<b>2,174</b>	<b>(2,423)</b>	<b>2,436</b>	<b>(2,069)</b>	<b>(404)</b>
Total comprehensive income attributable to preferred noteholders	423					423
Total comprehensive income attributable to non-controlling interests				5		5
<b>Total comprehensive income</b>	<b>(101)</b>	<b>2,174</b>	<b>(2,423)</b>	<b>2,441</b>	<b>(2,069)</b>	<b>23</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated balance sheet

CHF million	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
As of 31 December 2017						
<b>Assets</b>						
Cash and balances with central banks	36,552	38,467	3,100	9,656	0	87,775
Due from banks	30,467	3,977	4,712	66,649	(92,112)	13,693
Cash collateral on securities borrowed	9,907	20,972	10,775	6,188	(35,448)	12,393
Reverse repurchase agreements	51,293	13,858	20,676	19,368	(27,955)	77,240
Trading portfolio assets	104,118	1,719	6,720	25,974	(7,723)	130,807
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	<i>58,524</i>	<i>0</i>	<i>2,303</i>	<i>7,411</i>	<i>(32,877)</i>	<i>35,363</i>
Positive replacement values	114,044	4,123	12,948	21,118	(34,004)	118,229
Cash collateral receivables on derivative instruments	22,346	696	2,129	10,828	(12,565)	23,434
Loans	106,469	184,331	51,743	24,078	(44,903)	321,718
Financial assets designated at fair value	34,097	12,768	3,351	10,820	(2,481)	58,556
Financial assets available for sale	3,607	790	6,495	918	(3,145)	8,665
Financial assets held to maturity	950	8,215	0	0	0	9,166
Investments in subsidiaries and associates	49,632	15	1	27	(48,657)	1,018
Property, equipment and software	6,384	92	979	529	0	7,985
Goodwill and intangible assets	294	0	4,880	1,281	(58)	6,398
Deferred tax assets	1,252	421	5,999	2,110	0	9,783
Other assets	18,157	1,179	11,101	2,456	(3,389)	29,505
<b>Total assets</b>	<b>589,570</b>	<b>291,624</b>	<b>145,611</b>	<b>202,001</b>	<b>(312,442)</b>	<b>916,363</b>
<b>Liabilities</b>						
Due to banks	24,361	20,728	3,160	51,915	(92,631)	7,533
Cash collateral on securities lent	29,898	1,323	2,243	3,774	(35,448)	1,789
Repurchase agreements	18,264	321	12,681	11,945	(27,955)	15,255
Trading portfolio liabilities	24,358	250	3,877	9,122	(7,145)	30,463
Negative replacement values	111,448	3,675	12,932	22,082	(34,004)	116,134
Cash collateral payables on derivative instruments	27,768	60	2,215	12,768	(12,565)	30,247
Due to customers	118,684	241,313	79,684	54,438	(46,977)	447,141
Financial liabilities designated at fair value	53,532	0	104	3,329	(2,762)	54,202
Debt issued	96,572	8,367	8	514	(711)	104,749
Provisions	1,057	145	1,682	200	0	3,084
Other liabilities	30,430	2,246	10,117	15,625	(3,428)	54,990
<b>Total liabilities</b>	<b>536,372</b>	<b>278,430</b>	<b>128,702</b>	<b>185,711</b>	<b>(263,626)</b>	<b>865,588</b>
<b>Equity attributable to shareholders</b>	<b>53,198</b>	<b>13,194</b>	<b>16,909</b>	<b>16,233</b>	<b>(48,816)</b>	<b>50,718</b>
Equity attributable to non-controlling interests				57		57
<b>Total equity</b>	<b>53,198</b>	<b>13,194</b>	<b>16,909</b>	<b>16,290</b>	<b>(48,816)</b>	<b>50,775</b>
<b>Total liabilities and equity</b>	<b>589,570</b>	<b>291,624</b>	<b>145,610</b>	<b>202,001</b>	<b>(312,442)</b>	<b>916,363</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.



## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated statement of cash flows

CHF million

For the year ended 31 December 2017	UBS AG <sup>1</sup>	UBS Switzerland AG <sup>1</sup>	UBS Americas Inc. <sup>1</sup>	Other subsidiaries <sup>1</sup>	UBS AG (consolidated)
<b>Net cash flow from / (used in) operating activities</b>	<b>(34,372)</b>	<b>(8,192)</b>	<b>(4,859)</b>	<b>(4,448)</b>	<b>(51,872)</b>
<b>Cash flow from / (used in) investing activities</b>					
Purchase of subsidiaries, associates and intangible assets	(1)	(2)	(17)	(82)	(102)
Disposal of subsidiaries, associates and intangible assets <sup>2</sup>	289	0	0	46	336
Purchase of property, equipment and software	(1,032)	(83)	(291)	(94)	(1,500)
Disposal of property, equipment and software	1	0	53	160	213
Purchase of financial assets available for sale	(231)	0	(2,855)	(5,362)	(8,448)
Disposal and redemption of financial assets available for sale	3,385	1,282	2,777	7,473	14,917
Net (purchase) / redemption of financial assets held to maturity	(448)	370	0	0	(77)
<b>Net cash flow from / (used in) investing activities</b>	<b>1,964</b>	<b>1,567</b>	<b>(333)</b>	<b>2,140</b>	<b>5,338</b>
<b>Cash flow from / (used in) financing activities</b>					
Net short-term debt issued / (repaid)	24,195	(5)	0	(49)	24,141
Distributions paid on UBS AG shares	(2,250)	0	0	0	(2,250)
Issuance of long-term debt, including financial liabilities designated at fair value	48,484	622	103	297	49,506
Repayment of long-term debt, including financial liabilities designated at fair value	(41,722)	(580)	(129)	(867)	(43,299)
Dividends paid and repayments of preferred notes	(776)	0	0	0	(776)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends	1,242	(191)	883	(1,934)	0
<b>Net cash flow from / (used in) financing activities</b>	<b>29,173</b>	<b>(154)</b>	<b>857</b>	<b>(2,558)</b>	<b>27,317</b>
<b>Total cash flow</b>					
<b>Cash and cash equivalents at the beginning of the year</b>	<b>44,269</b>	<b>46,629</b>	<b>11,892</b>	<b>18,317</b>	<b>121,107</b>
Net cash flow from / (used in) operating, investing and financing activities	(3,236)	(6,780)	(4,335)	(4,866)	(19,216)
Effects of exchange rate differences on cash and cash equivalents	(511)	79	(400)	1,096	264
<b>Cash and cash equivalents at the end of the year<sup>3</sup></b>	<b>40,522</b>	<b>39,928</b>	<b>7,157</b>	<b>14,547</b>	<b>102,154</b>
<i>of which: cash and balances with central banks</i>	<i>36,477</i>	<i>38,467</i>	<i>3,100</i>	<i>9,656</i>	<i>87,700</i>
<i>of which: due from banks</i>	<i>2,285</i>	<i>1,455</i>	<i>3,945</i>	<i>4,721</i>	<i>12,406</i>
<i>of which: money market paper<sup>4</sup></i>	<i>1,760</i>	<i>7</i>	<i>112</i>	<i>169</i>	<i>2,049</i>

<sup>1</sup> Cash flows generally represent a third-party view from a UBS AG consolidated perspective. <sup>2</sup> Includes dividends received from associates. <sup>3</sup> CHF 2,434 million of cash and cash equivalents were restricted.

<sup>4</sup> Money market paper is included in the balance sheet under Trading portfolio assets, Financial investments available for sale and Financial assets designated at fair value.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated income statement

<i>CHF million</i>	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	UBS Preferred Funding Trust IV & V	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2016							
<b>Operating income</b>							
Interest income	8,500	4,151	2,227	25	1,148	(2,269)	13,782
Interest expense	(6,686)	(714)	(1,135)		(919)	2,054	(7,399)
Net interest income	1,815	3,438	1,092	25	229	(215)	6,383
Credit loss (expense) / recovery	(24)	(3)	(6)		(3)		(37)
Net interest income after credit loss expense	1,790	3,434	1,086	25	226	(215)	6,346
Net fee and commission income	1,500	3,782	7,873		3,332	(40)	16,447
Net trading income	3,717	780	454		310	(318)	4,943
Other income	8,113	346	576		1,677	(10,027)	685
<b>Total operating income</b>	<b>15,120</b>	<b>8,343</b>	<b>9,988</b>	<b>25</b>	<b>5,545</b>	<b>(10,600)</b>	<b>28,421</b>
<b>Operating expenses</b>							
Personnel expenses	5,691	2,044	6,243		1,613	0	15,591
General and administrative expenses	5,213	3,507	3,402		2,458	(6,891)	7,690
Depreciation and impairment of property, equipment and software	699	12	184		85	0	980
Amortization and impairment of intangible assets	22	0	60		9	0	91
<b>Total operating expenses</b>	<b>11,625</b>	<b>5,563</b>	<b>9,889</b>		<b>4,165</b>	<b>(6,891)</b>	<b>24,352</b>
<b>Operating profit / (loss) before tax</b>	<b>3,495</b>	<b>2,780</b>	<b>99</b>	<b>25</b>	<b>1,380</b>	<b>(3,710)</b>	<b>4,069</b>
Tax expense / (benefit)	892	589	(1,175)		482	(7)	781
Net profit / (loss)	2,603	2,191	1,274	25	898	(3,703)	3,288
Net profit / (loss) attributable to preferred noteholders	78	0	0	31	0	(31)	78
Net profit / (loss) attributable to non-controlling interests	0	0	0		4	0	4
<b>Net profit / (loss) attributable to shareholders</b>	<b>2,525</b>	<b>2,191</b>	<b>1,274</b>	<b>(6)</b>	<b>894</b>	<b>(3,672)</b>	<b>3,207</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated statement of comprehensive income

<i>CHF million</i>	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	UBS Preferred Funding Trust IV & V	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2016							
<b>Comprehensive income attributable to shareholders</b>							
Net profit / (loss)	2,525	2,191	1,274	(6)	894	(3,672)	3,207
<b>Other comprehensive income</b>							
<b>Other comprehensive income that may be reclassified to the income statement</b>							
Foreign currency translation, net of tax	335	0	285		(707)	379	293
Financial assets available for sale, net of tax	(22)	(33)	(8)		(18)	6	(73)
Cash flow hedges, net of tax	(805)	109	0		0	29	(666)
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>(491)</b>	<b>77</b>	<b>277</b>	<b>0</b>	<b>(725)</b>	<b>415</b>	<b>(447)</b>
<b>Other comprehensive income that will not be reclassified to the income statement</b>							
Defined benefit plans, net of tax	(651)	(54)	(59)		(36)	(25)	(824)
Own credit on financial liabilities designated at fair value, net of tax	(115)						(115)
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>(766)</b>	<b>(54)</b>	<b>(59)</b>	<b>0</b>	<b>(36)</b>	<b>(25)</b>	<b>(939)</b>
<b>Total other comprehensive income</b>	<b>(1,257)</b>	<b>23</b>	<b>218</b>	<b>0</b>	<b>(761)</b>	<b>390</b>	<b>(1,386)</b>
<b>Total comprehensive income attributable to shareholders</b>	<b>1,268</b>	<b>2,214</b>	<b>1,492</b>	<b>(6)</b>	<b>133</b>	<b>(3,282)</b>	<b>1,820</b>
<b>Total comprehensive income attributable to preferred noteholders</b>							
	349						349
<b>Total comprehensive income attributable to non-controlling interests</b>							
	0				3		3
<b>Total comprehensive income attributable to UBS Preferred Funding Trust IV &amp; V</b>							
							0
<b>Total comprehensive income</b>	<b>1,617</b>	<b>2,214</b>	<b>1,492</b>	<b>(6)</b>	<b>137</b>	<b>(3,282)</b>	<b>2,173</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated balance sheet

CHF million	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
As of 31 December 2016						
<b>Assets</b>						
Cash and balances with central banks	40,538	44,528	8,925	13,775	0	107,767
Due from banks	30,008	3,886	3,759	33,420	(57,948)	13,125
Cash collateral on securities borrowed	6,561	6,657	13,173	5,004	(16,284)	15,111
Reverse repurchase agreements	52,782	19,273	14,406	7,507	(27,722)	66,246
Trading portfolio assets	74,172	1,673	4,702	22,729	(6,615)	96,661
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	<i>39,596</i>	<i>0</i>	<i>1,960</i>	<i>5,850</i>	<i>(17,145)</i>	<i>30,260</i>
Positive replacement values	156,375	5,458	9,496	27,231	(40,149)	158,411
Cash collateral receivables on derivative instruments	22,117	913	2,701	12,068	(11,135)	26,664
Loans	94,506	184,241	50,150	41,199	(63,091)	307,004
Financial assets designated at fair value	35,498	16,416	5,371	11,589	(3,849)	65,024
Financial assets available for sale	8,104	2,046	6,593	3,469	(4,536)	15,676
Financial assets held to maturity	527	8,762	0	0	0	9,289
Investments in subsidiaries and associates	49,904	22	1	27	(48,991)	963
Property, equipment and software	6,961	19	1,075	241	0	8,297
Goodwill and intangible assets	297	0	5,130	1,161	(32)	6,556
Deferred tax assets	1,801	601	9,148	1,595	0	13,144
Other assets	10,645	1,526	9,071	7,241	(3,071)	25,412
<b>Total assets</b>	<b>590,796</b>	<b>296,022</b>	<b>143,702</b>	<b>188,257</b>	<b>(283,424)</b>	<b>935,353</b>
<b>Liabilities</b>						
Due to banks	27,992	13,204	5,288	32,733	(68,572)	10,645
Cash collateral on securities lent	13,193	1,518	2,549	1,841	(16,284)	2,818
Repurchase agreements	16,944	5,385	2,710	9,295	(27,722)	6,612
Trading portfolio liabilities	15,535	154	3,643	9,780	(6,287)	22,825
Negative replacement values	151,274	4,982	9,491	28,213	(40,149)	153,810
Cash collateral payables on derivative instruments	31,585	109	2,409	12,504	(11,135)	35,472
Due to customers	118,934	248,731	85,702	53,474	(56,641)	450,199
Financial liabilities designated at fair value	54,504	0	1	4,559	(4,047)	55,017
Debt issued	70,558	8,330	145	401	(437)	78,998
Provisions	1,483	186	2,168	312	21	4,169
Other liabilities	31,879	2,212	11,100	18,352	(3,099)	60,443
<b>Total liabilities</b>	<b>533,881</b>	<b>284,811</b>	<b>125,206</b>	<b>171,464</b>	<b>(234,353)</b>	<b>881,009</b>
<b>Equity attributable to shareholders</b>	<b>56,273</b>	<b>11,211</b>	<b>18,496</b>	<b>16,754</b>	<b>(49,072)</b>	<b>53,662</b>
Equity attributable to preferred noteholders	642	0	0	0	0	642
Equity attributable to non-controlling interests	0	0	0	40	0	40
<b>Total equity</b>	<b>56,915</b>	<b>11,211</b>	<b>18,496</b>	<b>16,793</b>	<b>(49,072)</b>	<b>54,343</b>
<b>Total liabilities and equity</b>	<b>590,796</b>	<b>296,022</b>	<b>143,702</b>	<b>188,257</b>	<b>(283,424)</b>	<b>935,353</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated statement of cash flows

CHF million	UBS AG <sup>1</sup>	UBS Switzerland AG <sup>1</sup>	UBS Americas Inc. <sup>1</sup>	Other subsidiaries <sup>1</sup>	UBS AG (consolidated)
For the year ended 31 December 2016					
<b>Net cash flow from / (used in) operating activities</b>	(26,981)	(3,914)	8,979	4,503	(17,413)
<b>Cash flow from / (used in) investing activities</b>					
Purchase of subsidiaries, associates and intangible assets	0	(3)	0	(23)	(26)
Disposal of subsidiaries, associates and intangible assets <sup>2</sup>	93	0	0	0	93
Purchase of property, equipment and software	(1,332)	(16)	(288)	(111)	(1,746)
Disposal of property, equipment and software	175	0	1	32	209
Purchase of financial assets available for sale	(694)	(998)	(2,792)	(2,788)	(7,271)
Disposal and redemption of financial assets available for sale	24,902	21,729	1,694	5,772	54,097
Net (purchase) / redemption of financial assets held to maturity	(527)	(8,468)	0	0	(8,996)
<b>Net cash flow from / (used in) investing activities</b>	22,616	12,245	(1,384)	2,882	36,359
<b>Cash flow from / (used in) financing activities</b>					
Net short-term debt issued / (repaid)	8,229	(7)	(2,975)	193	5,440
Distributions paid on UBS AG shares	(3,434)	0	0	0	(3,434)
Issuance of long-term debt, including financial liabilities designated at fair value	31,484	733	196	1,039	33,453
Repayment of long-term debt, including financial liabilities designated at fair value	(32,279)	(669)	(8)	(1,126)	(34,081)
Dividends paid and repayments of preferred notes	(1,366)	0	0	0	(1,366)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends	(1,333)	(2,000)	0	3,333	0
<b>Net cash flow from / (used in) financing activities</b>	1,300	(1,943)	(2,786)	3,435	6
<b>Total cash flow</b>					
<b>Cash and cash equivalents at the beginning of the year</b>	47,902	40,246	7,084	7,731	102,962
Net cash flow from / (used in) operating, investing and financing activities	(3,065)	6,388	4,808	10,821	18,952
Effects of exchange rate differences on cash and cash equivalents	(569)	(4)	0	(234)	(807)
<b>Cash and cash equivalents at the end of the year<sup>3</sup></b>	44,269	46,629	11,892	18,317	121,107
<i>of which: cash and balances with central banks</i>	40,486	44,528	8,925	13,775	107,715
<i>of which: due from banks</i>	2,836	2,095	2,931	4,065	11,927
<i>of which: money market paper<sup>4</sup></i>	946	7	36	477	1,465

<sup>1</sup> Cash flows generally represent a third-party view from a UBS AG (consolidated) perspective. As a consequence, the non-consolidated UBS Preferred Funding Trusts IV and V are not presented in this table. For the year ended 31 December 2016, these trusts had cash inflows of CHF 1,317 million from operating activities and an equivalent cash outflow for dividends paid to preferred note holders. <sup>2</sup> Includes dividends received from associates. <sup>3</sup> CHF 2,662 million of cash and cash equivalents were restricted. <sup>4</sup> Money market paper is included in the balance sheet under Trading portfolio assets, Financial investments available for sale and Financial assets designated at fair value.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated income statement

<i>CHF million</i>	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	UBS Preferred Funding Trust IV & V	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2015							
<b>Operating income</b>							
Interest income	9,102	3,039	1,367	63	1,626	(2,020)	13,178
Interest expense	(5,885)	(545)	(501)		(1,410)	1,892	(6,449)
Net interest income	3,218	2,494	866	63	217	(128)	6,729
Credit loss (expense) / recovery	(109)	(12)	0		4	0	(117)
Net interest income after credit loss expense	3,109	2,482	866	63	220	(128)	6,612
Net fee and commission income	2,738	3,001	7,940		3,586	(81)	17,184
Net trading income	5,031	735	355		331	(756)	5,696
Other income	15,371	120	774		89	(15,243)	1,112
<b>Total operating income</b>	<b>26,249</b>	<b>6,338</b>	<b>9,935</b>	<b>63</b>	<b>4,227</b>	<b>(16,208)</b>	<b>30,605</b>
<b>Operating expenses</b>							
Personnel expenses	6,800	1,607	6,281		1,265	0	15,954
General and administrative expenses	5,439	2,621	3,785		2,254	(5,880)	8,219
Depreciation and impairment of property, equipment and software	672	11	159		76	0	918
Amortization and impairment of intangible assets	22	0	73		12	0	107
<b>Total operating expenses</b>	<b>12,934</b>	<b>4,239</b>	<b>10,298</b>		<b>3,607</b>	<b>(5,880)</b>	<b>25,198</b>
<b>Operating profit / (loss) before tax</b>	<b>13,315</b>	<b>2,099</b>	<b>(362)</b>	<b>63</b>	<b>619</b>	<b>(10,327)</b>	<b>5,407</b>
Tax expense / (benefit)	1,136	489	(1,200)		(1,317)	(16)	(908)
Net profit / (loss)	12,180	1,610	837	63	1,936	(10,313)	6,314
Net profit / (loss) attributable to preferred noteholders	77	0	0	31	0	(31)	77
Net profit / (loss) attributable to non-controlling interests	0	0	0		3	0	3
<b>Net profit / (loss) attributable to shareholders</b>	<b>12,103</b>	<b>1,610</b>	<b>837</b>	<b>32</b>	<b>1,933</b>	<b>(10,281)</b>	<b>6,235</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under Complementary financial information for legal entities and sub-groups at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated statement of comprehensive income

<i>CHF million</i>	UBS AG (standalone) <sup>1</sup>	UBS Switzerland AG (standalone) <sup>1</sup>	UBS Americas Inc. <sup>2</sup>	UBS Preferred Funding Trust IV & V	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2015							
<b>Comprehensive income attributable to shareholders</b>							
Net profit / (loss)	12,103	1,610	837	32	1,933	(10,281)	6,235
<b>Other comprehensive income</b>							
<b>Other comprehensive income that may be reclassified to the income statement</b>							
Foreign currency translation, net of tax	(11)	0	121		(843)	467	(266)
Financial assets available for sale, net of tax	(51)	43	(21)		(16)	(19)	(64)
Cash flow hedges, net of tax	(503)	(72)	0		0	57	(518)
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>(564)</b>	<b>(29)</b>	<b>100</b>	<b>0</b>	<b>(859)</b>	<b>504</b>	<b>(848)</b>
<b>Other comprehensive income that will not be reclassified to the income statement</b>							
Defined benefit plans, net of tax	701	(337)	(71)		27	(15)	304
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>701</b>	<b>(337)</b>	<b>(71)</b>	<b>0</b>	<b>27</b>	<b>(15)</b>	<b>304</b>
<b>Total other comprehensive income</b>	<b>136</b>	<b>(366)</b>	<b>29</b>	<b>0</b>	<b>(832)</b>	<b>489</b>	<b>(545)</b>
<b>Total comprehensive income attributable to shareholders</b>	<b>12,239</b>	<b>1,244</b>	<b>866</b>	<b>32</b>	<b>1,101</b>	<b>(9,792)</b>	<b>5,690</b>
Total comprehensive income attributable to preferred noteholders	18	0	0	0	0	0	18
Total comprehensive income attributable to non-controlling interests	0	0	0	0	1	0	1
Total comprehensive income attributable to UBS Preferred Funding Trust IV & V	0	0	0	40	0	(40)	0
<b>Total comprehensive income</b>	<b>12,257</b>	<b>1,244</b>	<b>866</b>	<b>72</b>	<b>1,102</b>	<b>(9,832)</b>	<b>5,709</b>

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information for legal entities and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors) for information prepared in accordance with Swiss GAAP. <sup>2</sup> Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

## Note 37 Supplemental guarantor information required under SEC regulations (continued)

### Supplemental guarantor consolidated statement of cash flows

CHF million	UBS AG <sup>1</sup>	UBS Switzerland AG <sup>1</sup>	UBS Americas Inc. <sup>1</sup>	Other subsidiaries <sup>1</sup>	UBS AG (consolidated)
For the year ended 31 December 2015					
<b>Net cash flow from / (used in) operating activities</b>	(1,457)	2,681	(525)	1,298	1,997
<b>Cash flow from / (used in) investing activities</b>					
Purchase of subsidiaries, associates and intangible assets	(12)	0	1	0	(13)
Disposal of subsidiaries, associates and intangible assets <sup>2</sup>	464	0	13	0	477
Purchase of property, equipment and software	(1,423)	(5)	(299)	(114)	(1,841)
Disposal of property, equipment and software	503	0	9	35	547
Purchase of financial assets available for sale	(66,659)	(18,686)	(2,722)	(13,123)	(101,189)
Disposal and redemption of financial assets available for sale	51,515	22,501	2,952	16,616	93,584
Net (purchase) / redemption of financial assets held to maturity					
<b>Net cash flow from / (used in) investing activities</b>	(15,613)	3,810	(47)	3,415	(8,434)
<b>Cash flow from / (used in) financing activities</b>					
Net short-term debt issued / (repaid)	(5,603)	24	(826)	0	(6,404)
Distributions paid on UBS AG shares	(2,626)	0	0	0	(2,626)
Issuance of long-term debt, including financial liabilities designated at fair value	46,882	772	7	129	47,790
Repayment of long-term debt, including financial liabilities designated at fair value	(42,415)	(402)	(129)	(1,274)	(44,221)
Dividends paid and repayments of preferred notes	(108)	0	0	0	(108)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends <sup>3</sup>	(30,512)	33,293	(114)	(2,666)	0
<b>Net cash flow from / (used in) financing activities</b>	(34,382)	33,687	(1,062)	(3,817)	(5,573)
<b>Total cash flow</b>					
<b>Cash and cash equivalents at the beginning of the year</b>	100,662	0	8,960	7,093	116,715
Net cash flow from / (used in) operating, investing and financing activities	(51,451)	40,178	(1,634)	896	(12,010)
Effects of exchange rate differences on cash and cash equivalents	(1,309)	67	(241)	(259)	(1,742)
<b>Cash and cash equivalents at the end of the year<sup>4</sup></b>	47,902	40,246	7,084	7,731	102,962
<i>of which: cash and balances with central banks</i>	45,125	38,701	4,971	2,509	91,306
<i>of which: due from banks</i>	2,072	1,438	2,009	5,213	10,732
<i>of which: money market paper<sup>5</sup></i>	704	107	104	9	924

<sup>1</sup> Cash flows generally represent a third-party view from a UBS AG (consolidated) perspective. As a consequence, the non-consolidated UBS Preferred Funding Trusts IV and V are not presented in this table. For the year ended 31 December 2015, these trusts had cash inflows of CHF 77 million from operating activities and an equivalent cash outflow for dividends paid to preferred note holders. <sup>2</sup> Includes dividends received from associates. <sup>3</sup> Includes a transfer of cash and cash equivalents from UBS AG to UBS Switzerland AG of CHF 33,283 million. Refer to "Establishment of UBS Switzerland AG" in the "Legal entity financial and regulatory information" section of the UBS Group AG Annual Report 2015 for more information on the business transfer from UBS AG to UBS Switzerland AG. <sup>4</sup> CHF 3,963 million of cash and cash equivalents were restricted. <sup>5</sup> Money market paper is included in the balance sheet under Trading portfolio assets and Financial investments available for sale.



# Standalone financial statements

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# UBS Group AG standalone financial statements

Audited I

## Income statement

<i>CHF million</i>	Note	For the year ended	
		31.12.17	31.12.16
Dividend income from investments in subsidiaries	3	10	5,684
Other operating income	4	129	44
Financial income	5	580	475
<b>Operating income</b>		<b>719</b>	<b>6,202</b>
Personnel expenses	6	20	23
Other operating expenses	7	97	34
Amortization of intangible assets		4	0
Financial expenses	8	547	512
<b>Operating expenses</b>		<b>668</b>	<b>569</b>
Profit / (loss) before income taxes		51	5,633
Tax expense / (benefit)		4	27
<b>Net profit / (loss)</b>		<b>47</b>	<b>5,606</b>

**Balance sheet**

<i>CHF million</i>	Note	<b>31.12.17</b>	31.12.16
<b>Assets</b>			
Liquid assets	9	<b>2,543</b>	1,714
Marketable securities	10	<b>100</b>	78
Other short-term receivables	11	<b>710</b>	2,830
Accrued income and prepaid expenses	12	<b>437</b>	469
<b>Total current assets</b>		<b>3,790</b>	5,090
Investments in subsidiaries	13	<b>40,441</b>	40,451
<i>of which: investment in UBS AG</i>		<b>40,126</b>	40,376
Financial assets	14	<b>8,742</b>	8,162
Prepaid assets		<b>9</b>	27
Other intangible assets		<b>16</b>	21
<b>Total non-current assets</b>		<b>49,208</b>	48,661
<b>Total assets</b>		<b>52,998</b>	53,751
<i>of which: amounts due from subsidiaries</i>		<b>12,064</b>	12,762
<b>Liabilities</b>			
Current interest-bearing liabilities		<b>1,640</b>	595
Accrued expenses and deferred income	15	<b>1,871</b>	1,487
<b>Total short-term liabilities</b>		<b>3,511</b>	2,082
Long-term interest-bearing liabilities	16	<b>7,882</b>	7,865
Compensation-related long-term liabilities	17	<b>3,311</b>	3,479
<b>Total long-term liabilities</b>		<b>11,193</b>	11,344
<b>Total liabilities</b>		<b>14,704</b>	13,427
<i>of which: amounts due to subsidiaries</i>		<b>1,853</b>	612
<b>Equity</b>			
Share capital	18	<b>385</b>	385
General reserves		<b>32,683</b>	34,886
<i>of which: statutory capital reserve</i>		<b>32,683</b>	34,886
<i>of which: capital contribution reserve</i>		<b>32,683</b>	34,886
Voluntary earnings reserve		<b>7,323</b>	1,716
Treasury shares	19	<b>(2,145)</b>	(2,271)
Reserve for own shares held by subsidiaries		<b>1</b>	2
Net profit / (loss)		<b>47</b>	5,606
<b>Equity attributable to shareholders</b>		<b>38,294</b>	40,324
<b>Total liabilities and equity</b>		<b>52,998</b>	53,751

## Statement of appropriation of retained earnings and proposed dividend distribution out of capital contribution reserve

The Board of Directors proposes that the Annual General Meeting of Shareholders (AGM) on 3 May 2018 approve the following appropriation of retained earnings.

### Proposed appropriation of retained earnings

	For the year ended
<i>CHF million</i>	<b>31.12.17</b>
Net profit for the period	47
Retained earnings carried forward	0
<b>Total retained earnings available for appropriation</b>	<b>47</b>
<b>Appropriation of retained earnings</b>	
Appropriation to voluntary earnings reserve	(47)
<b>Retained earnings carried forward</b>	<b>0</b>

### Proposed dividend distribution out of capital contribution reserve

The Board of Directors proposes that the AGM on 3 May 2018 approve an ordinary dividend distribution of CHF 0.65 in cash per share of CHF 0.10 par value payable out of the capital contribution reserve. Provided that the proposed dividend distribution out of the capital contribution reserve is approved,

the payment of CHF 0.65 per share will be made on 9 May 2018 to holders of shares on the record date 8 May 2018. The shares will be traded ex-dividend as of 7 May 2018 and, accordingly, the last day on which the shares may be traded with entitlement to receive the dividend will be 4 May 2018.

<i>CHF million, except where indicated</i>	<b>31.12.17</b>
<b>Total statutory capital reserve: capital contribution reserve before proposed distribution<sup>1</sup></b>	<b>32,683</b>
Proposed ordinary distribution of capital contribution reserve within statutory capital reserve: CHF 0.65 per dividend-bearing share <sup>2</sup>	(2,505)
<b>Total statutory capital reserve: capital contribution reserve after proposed distribution</b>	<b>30,179</b>

<sup>1</sup> The Swiss Federal Tax Administration's current position is that, of the CHF 32.7 billion capital contribution reserve available as of 31 December 2017, an amount limited to CHF 18.0 billion is available from which dividends may be paid without a Swiss withholding tax deduction. <sup>2</sup> Dividend-bearing shares are all shares issued except for treasury shares held by UBS Group AG as of the record date. The amount of CHF 2,505 million presented is based on the total number of shares issued as of 31 December 2017.

## Note 1 Corporate information

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UBS Group AG is incorporated and domiciled in Switzerland and its registered office is at Bahnhofstrasse 45, CH-8001 Zurich, Switzerland. UBS Group AG operates under article 620ff. of the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares.

UBS Group AG is the ultimate holding company of the UBS Group, the grantor of the majority of UBS's deferred compensation plans and issuer of long-term capital instruments.

### Issuance of additional tier 1 capital instruments

During 2016 and 2015, UBS Group AG issued perpetual capital notes, which qualify as Basel III additional tier 1 (AT1) capital on a consolidated UBS Group basis. The proceeds from the issuances of those instruments were on-lent to UBS AG.

→ **Refer to Note 16 for more information on the main terms and conditions of the perpetual capital notes issued during 2016 and 2015**

Furthermore, UBS Group AG granted Deferred Contingent Capital Plan (DCCP) awards to UBS Group employees during 2017, 2016 and 2015. These DCCP awards also qualify as Basel III AT1 capital on a consolidated UBS Group basis.

As of 31 December 2017, UBS Group AG's distributable items for the purpose of AT1 capital instruments were CHF 37.8 billion (31 December 2016: CHF 39.9 billion). For this purpose, distributable items are defined in the terms and conditions of the relevant instruments as the aggregate of (i) net profits carried forward and (ii) freely distributable reserves, in each case, less any amounts that must be contributed to legal reserves under applicable law.

## Note 2 Accounting policies

The UBS Group AG standalone financial statements are prepared in accordance with the principles of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations).

The functional currency of UBS Group AG is the Swiss franc. The significant accounting and valuation principles applied are described below.

### Foreign currency translation

Transactions denominated in foreign currency are translated into Swiss francs at the spot exchange rate on the date of the transaction. At the balance sheet date, all current assets and short-term liabilities as well as *Financial assets* measured at fair value, which are denominated in a foreign currency, are translated into Swiss francs using the closing exchange rate. For other non-current assets and long-term liabilities, where the asset mirrors the terms of a corresponding liability or the asset and liability otherwise form an economic hedge relationship, the asset and liability are treated as one unit of account for foreign currency translation purposes, with offsetting unrealized foreign currency translation gains and losses based on the closing exchange rate presented net in the income statement. *Investments in subsidiaries* measured at historic cost are translated at the spot exchange rate on the date of the transaction. All currency translation effects are recognized in the income statement.

The main currency translation rates used by UBS Group AG are provided in Note 34 to the consolidated financial statements.

### Marketable securities

*Marketable securities* include investments in alternative investment vehicles (AIVs) with a short-term holding period. The holding period is deemed short-term if the vesting of the awards hedged by the AIV is within 12 months after the balance sheet date. These are equity instruments and are measured at fair value based on quoted market prices or other observable market prices as of the balance sheet date. Gains and losses resulting from fair value changes are recognized in *Financial income* and *Financial expenses*, respectively.

### Financial assets

*Financial assets* include investments in AIVs with a long-term holding period. The holding period is deemed long-term if the vesting of the awards hedged by the AIV is more than 12 months after the balance sheet date. These are equity instruments and are measured at fair value based on their quoted market prices or other observable market prices as of the balance sheet date. Gains and losses resulting from fair value changes are recognized in *Financial income* and *Financial expenses*, respectively.

Investments in AIVs that have no quoted market price or no other observable market price are recognized as *Financial assets*

and are measured at their acquisition cost adjusted for impairment losses.

*Financial assets* further include loans granted to UBS AG that substantially mirror the terms of AT1 perpetual capital notes issued and fixed-term deposits with UBS AG with maturities more than 12 months after the balance sheet date. The loans and deposits are measured at nominal value.

→ Refer to Note 14 for more information

### Derivative instruments

UBS Group AG uses derivative instruments to manage exposures to foreign currency risks from investments in foreign subsidiaries. The derivative instruments are entered into with UBS AG, mirroring the conditions of the closing transactions UBS AG enters into with external third parties.

Derivative instruments are measured at fair value based on quoted market prices or other observable market prices as of the balance sheet date. Unrealized gains and losses are recognized as *Accrued income and prepaid expenses* and *Accrued expenses and deferred income*, respectively. Corresponding gains and losses resulting from fair value changes are recognized in *Financial income* and *Financial expenses*, respectively.

### Investments in subsidiaries

Investments in subsidiaries are equity interests that are held to carry on the business of UBS Group or for other strategic purposes. They include all subsidiaries directly held by UBS Group AG through which UBS conducts its business on a global basis. The investments are measured individually and carried at cost less impairment.

→ Refer to Note 13 for more information

→ Refer to Note 2 in the "Consolidated financial statements" section of this report for a description of businesses of the UBS Group

### Treasury shares

Treasury shares acquired by UBS Group AG are recognized at acquisition cost and are presented as a deduction from shareholders' equity. Upon disposal or settlement of related share awards, the realized gain or loss is recognized through the income statement as *Financial income* and *Financial expenses*, respectively. For settlement of related share awards, the realized gains and losses on treasury shares represent the difference between the market price of the treasury shares at settlement and their acquisition cost.

For shares of UBS Group AG acquired by a direct or indirect subsidiary, a *Reserve for own shares held by subsidiaries* is generally created in UBS Group AG's equity. However, where UBS AG or UBS Switzerland AG acquire shares of UBS Group AG and hold them in their trading portfolios, no *Reserve for own shares held by subsidiaries* is created.

→ Refer to Note 19 for more information

## Note 2 Accounting policies (continued)

### Equity participation and other compensation plans

#### Transfer from UBS AG to UBS Group AG

The transfer of the deferred compensation plans and related hedging assets in 2014 was conducted on an arm's length basis, with a step-up of the plan obligation to fair value. This step-up resulted in a net liability that was recorded in the standalone financial statements of UBS AG and transferred to UBS Group AG (net liability related to deferred compensation plan transfer) in 2014. The fair value of this net liability is taken into account in the income statement over the average vesting period (for share awards) or upon exercise / expiry (for option awards) as *Other operating income*. Upon exercise of option awards that are settled using conditional capital, the fair value of this net liability is recorded in the *Statutory capital reserve* within *General reserves*. The difference between the fair value of the hedging assets and the fair value of the obligations on the plans transferred was compensated for with a loan from UBS AG to UBS Group AG.

#### Equity participation plans

The grant date fair value of equity-settled share-based compensation awards granted to employees is generally recognized over the vesting period of the awards. Awards granted in the form of UBS Group AG shares and notional shares are settled by delivering UBS Group AG shares at vesting and are recognized as *Compensation-related long-term liabilities* if vesting is more than 12 months after the balance sheet date or as *Accrued expenses and deferred income* if vesting is within 12 months from the balance sheet date. The amount recognized is adjusted for forfeiture assumptions, such that the amount ultimately recognized is based on the number of awards that meet the related service conditions at the vesting date. The grant date fair value is based on the UBS Group AG share price, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable.

Upon settlement of the share awards, any realized gain or loss is recognized in the income statement as *Other operating income* and *Other operating expenses*, respectively. Realized gains and losses on share awards represent the difference between the market price of the treasury shares at settlement and the grant date fair value of the share awards.

For certain awards, employees receive beneficial and legal ownership of the underlying UBS Group AG shares at the grant date (prepaid awards). Such prepaid awards are recognized as *Prepaid assets* if vesting is more than 12 months after the balance sheet date or as *Accrued income and prepaid expenses* if vesting is within 12 months from the balance sheet date.

Shares awarded to employees that are settled using conditional capital are accounted for as follows at settlement: the amount paid by the employees for the nominal value of the shares awarded is recorded in *Share capital*, while any paid amount exceeding the nominal value is considered to be share premium and is recorded in the *Statutory capital reserve* within *General reserves*.

#### Other compensation plans

Deferred compensation plans that are not share-based, including DCCP awards and awards in the form of AIVs, are accounted for as cash-settled awards. The present value or fair value of the amount payable to employees that is settled in cash is recognized as a liability generally over the vesting period, as *Compensation-related long-term liabilities* if vesting is more than 12 months after the balance sheet date and as *Accrued expenses and deferred income* if vesting is within 12 months from the balance sheet date. The liabilities are remeasured at each balance sheet date at the present value of the corresponding DCCP award and the fair value of investments in AIVs, respectively. Gains and losses resulting from remeasurement of the liabilities are recognized in *Other operating income* and *Other operating expenses*, respectively.

#### Recharge of compensation expenses

Expenses related to deferred compensation plans are recharged by UBS Group AG to its subsidiaries employing the personnel. Upon recharge, UBS Group AG recognizes a receivable from its subsidiaries corresponding to a liability representing its obligation toward employees.

#### Dispensations in the standalone financial statements

As UBS Group AG prepares consolidated financial statements in accordance with IFRS, UBS Group AG is exempt from various disclosures in the standalone financial statements. The dispensations include the management report and the statement of cash flows, as well as certain note disclosures.



## Income statement notes

### Note 3 Dividend income from investments in subsidiaries

Dividend income from investments in subsidiaries in 2017 consists of CHF 5 million received from UBS Business Solutions AG related to the financial year ended 31 December 2016, which was approved by the Annual General Meeting of Shareholders of UBS Business Solutions AG on 27 April 2017, and CHF 5 million received from UBS Group Funding (Jersey) Ltd.

in the course of the liquidation of the entity, which was dissolved on 24 November 2017. In 2016, dividend from investments in subsidiaries consisted of CHF 3,434 million and CHF 2,250 million received from UBS AG related to the financial years ended 31 December 2015 and 31 December 2016, respectively.

### Note 4 Other operating income

CHF million	For the year ended	
	31.12.17	31.12.16
Fair value gains on AIV awards	0	6
Gains related to equity-settled awards <sup>1</sup>	104	24
Amortization of net liability related to deferred compensation plan transfer	1	2
Commission income from guarantees issued	24	12
<b>Total other operating income</b>	<b>129</b>	<b>44</b>

<sup>1</sup> Gains related to equity-settled awards in 2017 include the release of hidden reserves of CHF 88 million (2016: CHF 0).

### Note 5 Financial income

CHF million	For the year ended	
	31.12.17	31.12.16
Fair value gains on marketable securities and financial assets	49	0
Interest income on long-term receivables from UBS AG	525	470
Interest income on liquid assets	5	0
Foreign currency translation gains	0	4
<b>Total financial income</b>	<b>580</b>	<b>475</b>

### Note 6 Personnel expenses

Personnel expenses include recharges from UBS AG and UBS Business Solutions AG for personnel-related costs for activities performed by the personnel of those companies for the benefit of UBS Group AG.

UBS Group AG had no employees throughout 2017 and 2016. All employees of the UBS Group, including the members of the Group Executive Board (GEB) of UBS Group AG, were employed by subsidiaries of UBS Group AG. As of 31 December 2017, the UBS Group employed 61,253 personnel (31 December 2016: 59,387) on a full-time equivalent basis.

### Note 7 Other operating expenses

CHF million	For the year ended	
	31.12.17	31.12.16
Fair value losses on AIV awards	48	0
Losses related to equity-settled awards	18	3
Capital tax	14	13
Other	16	18
<b>Total other operating expenses</b>	<b>97</b>	<b>35</b>

### Note 8 Financial expenses

CHF million	For the year ended	
	31.12.17	31.12.16
Fair value losses on marketable securities and financial assets	0	3
Impairment losses on financial assets	2	3
Treasury share losses	12	35
Interest expense on interest-bearing liabilities	532	469
Brokerage fees paid	1	2
<b>Total financial expenses</b>	<b>547</b>	<b>512</b>

## Balance sheet notes

### Note 9 Liquid assets

As of 31 December 2017, liquid assets comprised CHF 1,663 million held on current accounts at UBS Switzerland AG and UBS AG and CHF 880 million of time deposits placed with UBS AG.

### Note 10 Marketable securities

Marketable securities include investments in AIVs related to compensation awards vesting within 12 months after the balance sheet date.

### Note 11 Other short-term receivables

<i>CHF million</i>	31.12.17	31.12.16
Receivables from UBS AG <sup>1</sup>	0	2,250
Loans to UBS Business Solutions AG	80	0
Receivables from employing entities related to compensation awards	621	557
Other	9	23
<b>Total other short-term receivables</b>	<b>710</b>	<b>2,830</b>

<sup>1</sup> Receivables from UBS AG as of 31 December 2016 related to the dividend for the financial year ended 31 December 2016. Refer to Note 3 for more information.

### Note 12 Accrued income and prepaid expenses

<i>CHF million</i>	31.12.17	31.12.16
Accrued interest income	368	375
Other accrued income and prepaid expenses	69	93
<b>Total accrued income and prepaid expenses</b>	<b>437</b>	<b>469</b>

## Note 13 Investments in subsidiaries

Unless otherwise stated, the subsidiaries listed below have share capital consisting solely of ordinary shares, which are held by UBS Group AG or UBS AG, respectively. The proportion of ownership interest held is equal to the voting rights held by UBS Group AG or UBS AG, respectively. The country where the respective registered office is located is also the principal place of business. UBS AG operates through a global network of branches and a significant proportion of its business activity is conducted outside Switzerland in the UK, US, Singapore, Hong

Kong and other countries. UBS Europe SE has branches and offices in a number of EU member states, including Germany, Italy, Luxembourg, Spain and Austria.

In 2017, UBS transferred shared services functions in Switzerland from UBS AG to UBS Business Solutions AG. This transfer resulted in a decrease of the investment value of UBS AG by CHF 250 million and a corresponding increase in the investment value of UBS Business Solutions AG.

UBS Group Funding (Jersey) Ltd. was dissolved in 2017.

### Subsidiaries of UBS Group AG as of 31 December 2017

Company	Registered office	Share capital in million	Equity interest accumulated in %
UBS AG	Zurich and Basel, Switzerland	CHF 385.8	100.0
UBS Business Solutions AG <sup>1</sup>	Zurich, Switzerland	CHF 1.0	100.0
UBS Group Funding (Switzerland) AG	Zurich, Switzerland	CHF 0.1	100.0

<sup>1</sup> UBS Business Solutions (India) Private Limited and UBS Business Solutions Poland Sp. z o.o. are directly held subsidiaries of UBS Business Solutions AG.

### Individually significant subsidiaries of UBS AG as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD 2,250.0 <sup>1</sup>	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF 43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD 0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR 446.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP 226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD 1,283.1 <sup>2</sup>	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF 10.0	100.0

<sup>1</sup> Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. <sup>2</sup> Comprised of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

Individually significant subsidiaries of UBS AG are those entities that contribute significantly to the Group's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to the Group's

total assets and profit or loss before tax, in accordance with Swiss regulations.

→ **Refer to Note 28 in the "Consolidated financial statements" section of this report for more information**

## Note 14 Financial assets

CHF million	31.12.17	31.12.16
Long-term receivables from UBS AG <sup>1</sup>	8,247	7,865
Long-term receivables from UBS Business Solutions AG	205	0
Investments in alternative investment vehicles at fair value related to awards vesting after 12 months	286	291
Investments in alternative investment vehicles at cost less impairment	4	6
<b>Total financial assets</b>	<b>8,742</b>	<b>8,162</b>

<sup>1</sup> Long-term receivables from UBS AG include the onward lending of the proceeds from the issuances of additional tier 1 perpetual capital notes.

**Note 15 Accrued expenses and deferred income**

<i>CHF million</i>	31.12.17	31.12.16
Short-term portion of net liability related to deferred compensation plan transfer	6	1
Short-term portion of compensation liabilities	1,461	1,048
<i>of which: Deferred Contingent Capital Plan</i>	486	93
<i>of which: other deferred compensation plans</i>	975	955
Accrued interest expense	356	374
Other	47	65
<b>Total accrued expenses and deferred income</b>	<b>1,871</b>	<b>1,487</b>

**Note 16 Long-term interest-bearing liabilities**

Long-term interest-bearing liabilities totaled CHF 7,882 million as of 31 December 2017 comprising CHF 7,677 million of notes issued and CHF 205 million of fixed-term loans from UBS AG.

<b>Notes issued, overview by amount, maturity and coupon</b>	31.12.17				31.12.16	
	Carrying value in transaction currency	Carrying value in CHF	Maturity <sup>1</sup>	Coupon <sup>1</sup>	Carrying value in transaction currency	Carrying value in CHF
<i>in million, except where indicated</i>						
Euro-denominated low-trigger loss-absorbing additional tier 1 perpetual capital notes	1,000	1,170	19.02.22	5.750%	1,000	1,071
US dollar-denominated low-trigger loss-absorbing additional tier 1 perpetual capital notes	1,250	1,218	19.02.25	7.000%	1,250	1,272
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,250	1,218	19.02.20	7.125%	1,250	1,272
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,575	1,535	07.08.25	6.875%	1,575	1,603
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,500	1,462	22.03.21	6.875%	1,500	1,527
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,100	1,072	10.08.21	7.125%	1,100	1,120
<b>Total notes issued</b>		<b>7,677</b>				<b>7,865</b>

<sup>1</sup> The disclosed maturity refers to the optional first call date of the respective issuance and the disclosed coupon refers to the fixed coupon rate from the issue date up to, but excluding, the optional first call date.

**Note 17 Compensation-related long-term liabilities**

<i>CHF million</i>	31.12.17	31.12.16
Long-term portion of net liability related to deferred compensation plan transfer	3	10
Long-term portion of compensation liabilities	3,308	3,469
<i>of which: Deferred Contingent Capital Plan</i>	1,504	1,532
<i>of which: other deferred compensation plans</i>	1,804	1,937
<b>Total compensation-related long-term liabilities</b>	<b>3,311</b>	<b>3,479</b>

**Note 18 Share capital**

As of 31 December 2017, the issued share capital consisted of 3,853,096,603 (31 December 2016: 3,850,766,389) registered shares at a par value of CHF 0.10 each.

→ Refer to "UBS shares" in the "Capital management" section of this report for more information on UBS Group AG shares

## Note 19 Treasury shares

	Number of registered shares	Average price in CHF
<b>Balance as of 31 December 2015</b>	<b>98,706,275</b>	<b>17.51</b>
<i>of which: treasury shares held by UBS Group AG</i>	<i>98,465,708</i>	<i>17.50</i>
<i>of which: treasury shares held by UBS AG and other subsidiaries</i>	<i>240,567</i>	<i>19.51</i>
Acquisitions	90,448,847	15.49
Disposals	(2,721,710)	17.82
Delivery of shares to settle equity-settled awards	(47,991,640)	16.86
<b>Balance as of 31 December 2016</b>	<b>138,441,772</b>	<b>16.41</b>
<i>of which: treasury shares held by UBS Group AG<sup>1</sup></i>	<i>138,386,307</i>	<i>16.41</i>
<i>of which: treasury shares held by UBS AG and other subsidiaries</i>	<i>55,465</i>	<i>16.06</i>
Acquisitions	54,828,640	15.87
Disposals	(1,689,932)	16.23
Delivery of shares to settle equity-settled awards	(59,278,930)	16.32
<b>Balance as of 31 December 2017</b>	<b>132,301,550</b>	<b>16.23</b>
<i>of which: treasury shares held by UBS Group AG<sup>1</sup></i>	<i>132,211,630</i>	<i>16.23</i>
<i>of which: treasury shares held by UBS AG and other subsidiaries</i>	<i>89,920</i>	<i>17.54</i>

<sup>1</sup> Treasury shares held by UBS Group AG had a carrying value of CHF 2,145 million as of 31 December 2017 (31 December 2016: CHF 2,271 million).

## Additional information

### **Note 20 Guarantees**

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As of 31 December 2017, UBS Group Funding (Switzerland) AG, a subsidiary of UBS Group AG, had issued CHF 27,706 million equivalent of senior debt (31 December 2016: CHF 17,281 million). This debt contributes to the total loss-absorbing

capacity (TLAC) of the Group. UBS Group AG issued guarantees to the external investors against any default in payments of interest and principal by UBS Group Funding (Switzerland) AG.

### **Note 21 Assets pledged to secure own liabilities**

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As of 31 December 2017, total pledged assets of UBS Group AG amounted to CHF 4,337 million. These assets consisted of certain liquid assets, marketable securities and financial assets and were pledged to UBS AG. As of 31 December 2016, total

pledged assets of UBS Group AG amounted to CHF 4,134 million. The associated liabilities secured by these pledged assets were CHF 1,800 million and CHF 524 million as of 31 December 2017 and 31 December 2016, respectively.

### **Note 22 Contingent liabilities**

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UBS Group AG is jointly and severally liable for the combined value added tax (VAT) liability of UBS entities that belong to the VAT group of UBS in Switzerland.

## Note 23 Significant shareholders

### Shareholders registered in the UBS Group AG share register with 3% or more of total share capital

<i>% of share capital</i>	31.12.17	31.12.16
Chase Nominees Ltd., London	11.16	9.43
DTC (Cede & Co.), New York <sup>1</sup>	6.64	6.62
Nortrust Nominees Ltd., London	4.11	3.88

<sup>1</sup> DTC (Cede & Co.), New York, "The Depository Trust Company," is a US securities clearing organization.

Under the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 19 June 2015 (FMIA), anyone holding shares in a company listed in Switzerland, or holding derivative rights related to shares of such a company, must notify the company and the SIX Swiss Exchange (SIX) if the holding reaches, falls below or exceeds one of the following thresholds: 3, 5, 10, 15, 20, 25, 33 $\frac{1}{3}$ , 50, or 66 $\frac{2}{3}$ % of voting rights, regardless of whether or not such rights may be exercised. The detailed disclosure requirements and the methodology for calculating the thresholds are defined in the Swiss Financial Market Supervisory Authority Ordinance on Financial Market Infrastructure (FMIO-FINMA). In particular, the FMIO-FINMA sets forth that nominee companies that cannot autonomously decide how voting rights are exercised are not obligated to notify the company and SIX if they reach, exceed or fall below the threshold percentages.

In addition, pursuant to the Swiss Code of Obligations, UBS must disclose in the Notes to its financial statements the identity of any shareholder with a holding of more than 5% of the total share capital of UBS Group AG.

According to disclosure notifications filed with UBS Group AG and the SIX under the applicable Swiss rules, the following entities held more than 3% of the total share capital of UBS Group AG as of 31 December 2017: BlackRock Inc., New York, disclosed a holding of 5.01% of the total share capital of UBS Group AG on 29 December 2017; MFS Investment Management, Boston, disclosed a holding of 3.05% on 10 February 2016; and Norges Bank, Oslo, the Central Bank of Norway, disclosed a holding of 3.30% on 10 December 2014.

With the exception of BlackRock Inc., New York, with a disclosed holding of 5.02% of the total share capital of UBS Group AG on 5 March 2018, the above disclosures have not been subsequently superseded and no new disclosures of significant shareholdings have been notified since 31 December 2017.

In accordance with the FMIA, the aforementioned holdings are calculated in relation to the total share capital of UBS Group AG reflected in its Articles of Association at the time of the respective disclosure notification.

Shareholders who notified a significant shareholding in accordance with the abovementioned requirements may or may not be recorded in the UBS share register, and therefore they may not necessarily appear in the table above. Information on disclosures under the FMIA is available at [www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html](http://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html).

The shareholders (acting in their own name or in their capacity as nominees for other investors or beneficial owners) listed in the table above were registered in the UBS share register with 3% or more of the total share capital of UBS Group AG as of 31 December 2017 or as of 31 December 2016.

### Cross-shareholdings

UBS Group AG has no cross-shareholdings in excess of a reciprocal ownership of 5% of capital or voting rights with any other company.

## Note 24 Share and option ownership of the members of the Board of Directors, the Group Executive Board and other employees

### Shares awarded

	For the year ended 31.12.17		For the year ended 31.12.16	
	Number of shares	Value of shares in CHF million	Number of shares	Value of shares in CHF million
Awarded to members of the BoD	416,980	7	411,962	6
Awarded to members of the GEB	2,720,614	43	2,572,329	39
Awarded to other UBS Group employees	61,152,037	874	79,900,730	1,107
<b>Total</b>	<b>64,289,631</b>	<b>923</b>	<b>82,885,021</b>	<b>1,152</b>

→ Refer to the “Corporate governance, responsibility and compensation” section in this report for more information on the terms and conditions of the shares and options awarded to the members of the Board of Directors and the Group Executive Board

### Number of shares of BoD members<sup>1</sup>

Name, function	on 31 December	Number of shares held	Voting rights in %
Axel A. Weber, Chairman	2017	642,100	0.037
	2016	635,751	0.038
Michel Demaré, Vice Chairman	2017	290,694	0.017
	2016	254,287	0.015
David Sidwell, Senior Independent Director	2017	154,672	0.009
	2016	205,540	0.012
Reto Francioni, member	2017	76,772	0.004
	2016	51,567	0.003
Ann F. Godbehere, member	2017	232,263	0.013
	2016	201,457	0.012
William G. Parrett, member	2017	106,916	0.006
	2016	104,385	0.006
Julie G. Richardson, member <sup>2</sup>	2017	0	–
	2016	–	–
Isabelle Romy, member	2017	94,376	0.005
	2016	91,038	0.005
Robert W. Scully, member	2017	29,917	0.002
	2016	0	0.000
Beatrice Weder di Mauro, member	2017	126,809	0.007
	2016	99,737	0.006
Dieter Wemmer, member	2017	14,002	0.001
	2016	0	0.000
Joseph Yam, former member <sup>2</sup>	2017	–	–
	2016	109,938	0.007
<b>Total</b>	2017	1,768,521	0.102
	2016	1,753,700	0.104

<sup>1</sup> Includes blocked and unblocked shares held by BoD members, including those held by related parties. No options were granted in 2017 and 2016. <sup>2</sup> Julie G. Richardson was newly elected and Joseph Yam stepped down from the BoD at the AGM on 4 May 2017.



## Note 24 Share and option ownership of the members of the Board of Directors, the Group Executive Board and other employees (continued)

### Share and option ownership / entitlements of GEB members<sup>1</sup>

Name, function	on 31 December	Number of unvested shares / at risk <sup>2</sup>	Number of vested shares	Total number of shares	Potentially conferred voting rights in %	Number of options <sup>3</sup>	Potentially conferred voting rights in % <sup>4</sup>
Sergio P. Ermotti, Group Chief Executive Officer	2017	1,632,464	460,377	2,092,841	0.121	0	0.000
	2016	1,365,537	265,515	1,631,052	0.097	0	0.000
Martin Blessing, Co-President Global Wealth Management	2017	65,761	0	65,761	0.004	0	0.000
	2016	0	0	0	0.000	0	0.000
Christian Bluhm, Group Chief Risk Officer	2017	131,520	0	131,520	0.008	0	0.000
	2016	0	0	0	0.000	0	0.000
Markus U. Diethelm, Group General Counsel	2017	589,659	194,000	783,659	0.045	0	0.000
	2016	538,520	154,820	693,340	0.041	0	0.000
Kirt Gardner, Group Chief Financial Officer	2017	264,718	61,652	326,370	0.019	0	0.000
	2016	142,646	38,581	181,227	0.011	0	0.000
Sabine Keller-Busse, Group Chief Operating Officer	2017	244,676	176,602	421,278	0.024	0	0.000
	2016	200,272	120,897	321,169	0.019	0	0.000
Ulrich Körner, President Asset Management and President UBS EMEA	2017	881,979	95,597	977,576	0.057	0	0.000
	2016	797,165	95,597	892,762	0.053	0	0.000
Axel P. Lehmann, President Personal & Corporate Banking and President UBS Switzerland	2017	156,180	277,978	434,158	0.025	0	0.000
	2016	0	277,978	277,978	0.017	0	0.000
Tom Naratil, Co-President Global Wealth Management and President UBS Americas	2017	1,047,311	422,298	1,469,609	0.085	281,640	0.016
	2016	838,193	352,634	1,190,827	0.071	412,917	0.025
Andrea Orcel, President Investment Bank	2017	1,328,113	251,439	1,579,552	0.091	0	0.000
	2016	1,203,535	184,220	1,387,755	0.083	0	0.000
Kathryn Shih, President UBS Asia Pacific	2017	581,546	0	581,546	0.034	74,599	0.004
	2016	567,777	0	567,777	0.034	143,869	0.009
Jürg Zeltner, former President Wealth Management	2017	976,001	1,075	977,076	0.057	42,628	0.002
	2016	881,976	1,075	883,051	0.053	64,164	0.004
<b>Total</b>	2017	7,899,928	1,941,018	9,840,946	0.569	398,867	0.023
	2016	6,535,621	1,514,211	8,049,832	0.479	620,950	0.037

<sup>1</sup> Includes all vested and unvested shares and options of GEB members, including those held by related parties. <sup>2</sup> Includes shares granted under variable compensation plans with forfeiture provisions. The actual number of shares vesting in the future will be calculated under the terms of the plans. Refer to the "Our deferred variable compensation plans for 2017" section of this report for more information on the plans. <sup>3</sup> Refer to "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information. <sup>4</sup> No conversion rights outstanding.

## Note 25 Related parties

Related parties are defined under the Swiss Code of Obligations as direct and indirect participants with voting rights of 20% or more, management bodies (BoD and GEB), external auditors and direct and indirect investments in subsidiaries. Payables due to

members of the GEB are provided in the table below. Amounts due from and due to subsidiaries are provided on the face of the balance sheet.

CHF million	31.12.17	31.12.16
Payables due to the members of the GEB	166	119
of which: <i>Deferred Contingent Capital Plan</i>	77	51
of which: <i>other deferred compensation plans</i>	89	68



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To the General Meeting of  
UBS Group AG, Zurich

Basel, 8 March 2018

## Report of the statutory auditor on the financial statements

As statutory auditor, we have audited the financial statements of UBS Group AG, which comprise the balance sheet, income statement and notes, for the year ended 31 December 2017.

### Board of Directors' responsibility

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

### Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the financial statements for the year ended 31 December 2017 comply with Swiss law and the company's articles of incorporation.

### Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. We have determined that there are no key audit matters to communicate in our report.

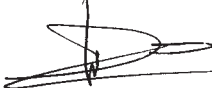
### Report on other legal requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a para. 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

Ernst & Young Ltd



Marie-Laure Delarue  
Licensed audit expert  
(Auditor in charge)



Bruno Patusi  
Licensed audit expert



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**Independent Auditor's Report  
to the Board of Directors of**

**UBS Group AG, Zurich**

As special auditors of UBS Group AG, we have audited the issuance of new shares and the preconditions for the adjustment of the provisions regarding the conditional capital increase according to article 4a of the articles of association in the period from 1 January 2017 to 31 December 2017 in accordance with article 653f paragraph 1 of the Swiss code of obligations (CO).

According to article 4a of the articles of association, the following possibilities for the issue of conditional capital exist:

- Paragraph 1; employee stock option plans of UBS Group AG, based on the resolution of the extraordinary general meeting of 26 November 2014.
- Paragraph 2; conversion rights and/or warrants granted in connection with the issue of bonds or similar financial instruments, based on the resolution of the extraordinary general meeting of 26 November 2014.

*Board of Directors' Responsibility*

The Board of Directors is responsible for the new share issue in accordance with the legal requirements and the company's articles of association.

*Auditor's Responsibility*

Our responsibility is to express an opinion based on our audit as to whether the new share issue complies with Swiss law and the company's articles of incorporation. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the new share issue complies with the legal requirements and the company's articles of incorporation.

An audit involves performing procedures to obtain audit evidence so that significant breaches of the legal requirements and the company's articles of incorporation for the new share issue may be identified with reasonable assurance. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material breaches of the requirements concerning the new share issue, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*Opinion*

In our opinion

- the issue of 2'330'214 new registered shares with a nominal value of CHF 0.10 per share relating to the employee stock option plans of UBS Group AG, according to article 4a paragraph 1 of the articles of association, was in accordance with the provisions of Swiss law and the company's articles of association;
- no new registered shares relating to the conversion rights and/or warrants granted in connection with the issue of bonds or similar financial instruments, according to article 4a paragraph 2 of the articles of association, were issued in the reporting period.

Zurich, 5 March 2018

BDO Ltd

Erik Dommach  
Auditor in charge  
Licensed audit expert

Franco A. Straub  
Licensed audit expert

BDO Ltd, a limited company under Swiss law, incorporated in Zurich, forms part of the international BDO Network of independent member firms.

Significant  
regulated  
subsidiary and  
sub-group  
information

# Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups

As of or for the year ended	UBS AG (standalone) CHF million, except where indicated		UBS Switzerland AG (standalone) CHF million, except where indicated		UBS Limited (standalone) GBP million, except where indicated		UBS Americas Holding LLC (consolidated) USD million, except where indicated	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16 <sup>1</sup>	31.12.17	31.12.16 <sup>1</sup>
<b>Financial information<sup>2,3,4</sup></b>								
<b>Income statement</b>								
Total operating income	10,297	15,111	8,350	8,341	796	762	12,019	10,610
Total operating expenses	9,837	13,352	6,419	6,644	599	565	10,717	10,471
Operating profit / (loss) before tax	460	1,759	1,931	1,697	197	197	1,302	139
Net profit / (loss)	909	3,244	1,513	1,313	114	26	(1,689)	1,413
<b>Balance sheet</b>								
Total assets	476,977	439,476	290,310	294,497	35,569	40,663	140,698	137,699
Total liabilities	427,030	387,937	275,525	281,034	32,761	37,789	117,869	113,151
Total equity	49,947	51,539	14,785	13,463	2,808	2,874	22,829	24,548
<b>Capital<sup>5,6</sup></b>								
Common equity tier 1 capital	48,374	33,983	10,160	10,416	2,344	2,521	10,839	11,598
Additional tier 1 capital	3,666	0	3,000	1,235 <sup>7</sup>	235	235	1,178	0
Tier 1 capital	52,040	33,983	13,160	11,651	2,579	2,756	12,017	11,598
Total going concern capital	59,914		13,160	11,651				
Tier 2 capital		0			685	687	722	722
Total gone concern loss-absorbing capacity			8,400	3,265 <sup>7</sup>				
Total capital		33,983			3,263	3,442	12,739	12,320
Total loss-absorbing capacity			21,560	14,916				
<b>Risk-weighted assets and leverage ratio denominator<sup>5,6</sup></b>								
Risk-weighted assets	277,529	232,422	92,894	93,281	10,473	11,081	49,558	51,488
Leverage ratio denominator	599,727	561,979	302,987	306,586	36,409	35,793	135,705	140,112
<b>Capital and leverage ratios (%)<sup>5,6</sup></b>								
Common equity tier 1 capital ratio	17.4	14.6	10.9	11.2	22.4	22.8	21.9	22.5
Tier 1 capital ratio		14.6			24.6	24.9	24.2	22.5
Going concern capital ratio	21.6		14.2	12.5				
Total capital ratio		14.6			31.2	31.1	25.7	23.9
Total loss-absorbing capacity ratio			23.2	16.0				
Leverage ratio <sup>8</sup>	10.0	6.0			7.1	7.7	8.9	8.3
Total loss-absorbing capacity leverage ratio			7.1	4.9				
<b>Liquidity<sup>6,9,10</sup></b>								
High-quality liquid assets (billion)	87	98	69	75	6			
Net cash outflows (billion)	66	76	48	63	1			
Liquidity coverage ratio (%)	132	129	144	120	454			
<b>Other</b>								
Joint and several liability between UBS AG and UBS Switzerland AG (billion) <sup>11</sup>	0	1	69	91				

<sup>1</sup> Figures as of or for the year ended 31 December 2016 have been adjusted for consistency with the full year financial statements and local regulatory reporting of the respective entity, which were finalized after the publication date of UBS Annual Report 2016. <sup>2</sup> UBS AG and UBS Switzerland AG financial information is prepared in accordance with Swiss GAAP (FINMA Circular 2015/1 and Banking Ordinance), but does not represent financial statements under Swiss GAAP. <sup>3</sup> UBS Limited financial information is prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the EU, but does not represent financial statements under IFRS. <sup>4</sup> UBS Americas Holding LLC financial information is prepared in accordance with accounting principles generally accepted in the US (US GAAP), but does not represent financial statements under US GAAP. <sup>5</sup> For UBS AG and UBS Switzerland AG, based on the applicable phase-in rules for Swiss systemically relevant banks (SRBs). Since 1 July 2017, UBS AG is subject to going concern capital requirements, following the implementation of the FINMA decree issued on 20 October 2017. For UBS Limited, based on Directive 2013/36/EU and Regulation 575/2013 (together known as CRD IV) and their related technical standards, as implemented within the UK by the Prudential Regulation Authority (PRA). For UBS Americas Holding LLC, based on applicable US Basel III rules. <sup>6</sup> Refer to the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups under “Pillar 3 disclosures” at [www.ubs.com/investors](http://www.ubs.com/investors) for more information. <sup>7</sup> Under the Swiss SRB rules, going concern capital includes CET1 and high-trigger loss-absorbing additional tier 1 capital. Outstanding low-trigger loss-absorbing tier 2 capital instruments would qualify as going concern capital until the earlier of (i) their maturity or first call date or (ii) 31 December 2019. However, as of 31 December 2016, CHF 765 million of high-trigger loss-absorbing additional tier 1 capital as well as the total low-trigger loss-absorbing tier 2 capital of CHF 2,500 million was used to meet the gone concern requirements. <sup>8</sup> For UBS AG, on the basis of going concern capital as of 31 December 2017 and on the basis of total capital as of 31 December 2016. On the basis of tier 1 capital for UBS Limited and UBS Americas Holding LLC. <sup>9</sup> There was no local disclosure requirement for liquidity coverage ratio for UBS Limited as of 31 December 2016 or for UBS Americas Holding LLC as of 31 December 2017 and 31 December 2016. <sup>10</sup> For UBS Limited, the values represent a twelve-month average of the respective month-end balances in 2017 in line with the European Banking Authority guidelines on the liquidity coverage ratio disclosure (EBA/GL/2017/01). Including PRA Pillar 2 requirements, the equivalent average ratio for 2017 was 187%. <sup>11</sup> Refer to the “Capital management” section of this report for more information on the joint and several liability. Under certain circumstances, the Swiss Banking Act and FINMA’s Banking Insolvency Ordinance authorize FINMA to modify, extinguish or convert to common equity liabilities of a bank in connection with a resolution or insolvency of such bank.

The table in this section summarizes the regulatory capital components and capital ratios of our significant regulated subsidiaries and sub-groups determined under the regulatory framework of each subsidiary's or sub-group's home jurisdiction.

- Refer to **"Capital and capital ratios of our significant regulated subsidiaries" in the "Capital management" section of this report for more information**
- Refer to **"Note 23 Restricted and transferred financial assets" in the "Consolidated financial statements" section of this report for more information.**

Standalone regulatory information for UBS AG, UBS Switzerland AG and UBS Limited as well as consolidated regulatory information for UBS Americas Holding LLC is provided in the 31 December 2017 Pillar 3 report – Group and significant regulated subsidiaries and sub-groups, which is available under "Pillar 3 disclosures" at [www.ubs.com/investors](http://www.ubs.com/investors). Standalone financial statements for UBS Group AG as well as standalone financial statements and regulatory information for UBS AG, UBS Switzerland AG and UBS Limited are available under "Holding company and significant regulatory subsidiaries and sub-groups" at [www.ubs.com/investors](http://www.ubs.com/investors).





Additional  
regulatory  
information

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# UBS Group AG consolidated supplemental disclosures required under SEC regulations

## A – Introduction

The following pages contain supplemental UBS Group AG disclosures that are required under SEC regulations. UBS Group AG's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and are denominated in Swiss francs (CHF), which is also the functional currency of UBS Group AG and of UBS AG's Head Office and its Swiss-based operations.

## B – Selected financial data

The tables below provide information about the noon purchase rates for the Swiss franc, expressed in United States dollars, or USD, per one Swiss franc. The noon purchase rate is the rate in New York City for cable transfers in foreign currencies as

certified for customs purposes by the Federal Reserve Bank of New York.

On 28 February 2018, the noon purchase rate was 1.0604 USD per 1 CHF.

For the year ended 31 December	High	Low	Average rate (USD per 1 CHF) <sup>1</sup>	At period end
2013	1.1292	1.0190	1.0826	1.1231
2014	1.1478	1.0066	1.0893	1.0066
2015	1.1781	0.9704	1.0368	0.9983
2016	1.0487	0.9677	1.0128	0.9843
2017	1.0575	0.9741	1.0205	1.0269

For the month ended	High	Low
30 September 2017	1.0575	1.0262
31 October 2017	1.0275	1.0010
30 November 2017	1.0217	0.9986
31 December 2017	1.0269	1.0073
31 January 2018	1.0728	1.0171
28 February 2018	1.0832	1.0595

<sup>1</sup> Calculated using the average of the noon purchase rates on the last business day of each full month during the relevant period.

## Key figures

CHF million, except where indicated	As of or for the year ended				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Group results</b>					
Operating income	29,067	28,320	30,605	28,027	27,732
Operating expenses	23,800	24,230	25,116	25,567	24,461
Operating profit / (loss) from continuing operations before tax	5,268	4,090	5,489	2,461	3,272
Net profit / (loss) attributable to shareholders	1,053	3,204	6,203	3,466	3,172
Diluted earnings per share (CHF) <sup>1</sup>	0.27	0.84	1.64	0.91	0.83
<b>Key performance indicators<sup>2</sup></b>					
<b>Profitability</b>					
Return on tangible equity (%)	2.4	6.9	13.7	8.2	8.0
Return on assets, gross (%) <sup>3</sup>		3.0	3.1	2.8	2.5
Cost / income ratio (%)	81.5	85.4	81.8	91.0	88.0
<b>Growth</b>					
Net profit growth (%)	(67.1)	(48.3)	79.0	9.3	
Net new money growth for combined wealth management businesses (%) <sup>4</sup>	2.1	2.1	2.2	2.5	3.4
<b>Resources</b>					
Common equity tier 1 capital ratio (fully applied, %) <sup>5</sup>	13.8	13.8	14.5	13.4	12.8
Common equity tier 1 leverage ratio (fully applied, %) <sup>5,6</sup>	3.7	3.5	3.3	2.9	2.8
Going concern leverage ratio (fully applied, %) <sup>7</sup>	4.7	4.6			
Leverage ratio (phase-in, %) <sup>6,8</sup>			6.2	5.4	4.7
<b>Additional information</b>					
<b>Profitability</b>					
Return on equity (RoE) (%)	2.0	5.9	11.8	7.0	6.7
Return on risk-weighted assets, gross (%) <sup>9</sup>	12.6	13.2	14.4	12.6	11.6
Return on leverage ratio denominator, gross (%) <sup>9</sup>	3.3	3.2			
<b>Resources</b>					
Total assets	915,642	935,016	942,819	1,062,478	1,013,355
Equity attributable to shareholders	51,214	53,621	55,313	50,608	48,002
Common equity tier 1 capital (fully applied) <sup>5</sup>	32,671	30,693	30,044	28,941	28,908
Common equity tier 1 capital (phase-in) <sup>5</sup>	35,494	37,788	40,378	42,863	42,179
Risk-weighted assets (fully applied) <sup>5</sup>	237,494	222,677	207,530	216,462	225,153
Risk-weighted assets (phase-in) <sup>5</sup>	238,394	225,412	212,302	220,877	228,557
Common equity tier 1 capital ratio (phase-in, %) <sup>5</sup>	14.9	16.8	19.0	19.4	18.5
Going concern capital ratio (fully applied, %) <sup>7</sup>	17.6	17.9			
Total capital ratio (fully applied, %) <sup>8</sup>			22.9	18.9	15.4
Going concern capital ratio (phase-in, %) <sup>7</sup>	21.7	24.7			
Total capital ratio (phase-in, %) <sup>8</sup>			26.8	25.5	22.2
Going concern loss-absorbing capacity ratio (fully applied, %) <sup>7</sup>	15.3	13.2			
Leverage ratio denominator (fully applied) <sup>5,6</sup>	886,116	870,470	897,607	997,822	1,015,306
Leverage ratio denominator (phase-in) <sup>5,6</sup>	887,635	874,925	904,014	1,004,869	1,022,924
Leverage ratio (fully applied, %) <sup>5,8</sup>			5.3	4.1	3.4
Going concern leverage ratio (phase-in, %) <sup>7</sup>	5.8	6.4			
Going concern leverage ratio (fully applied, %) <sup>7</sup>	4.1	3.4			
Average equity / average assets ratio (%)	5.3	5.3	5.0	4.7	4.0

**Key figures (continued)**

CHF million, except where indicated	As of or for the year ended				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Other</b>					
Invested assets (CHF billion) <sup>10,11</sup>	<b>3,179</b>	2,810	2,678	2,723	2,381
Personnel (full-time equivalents)	<b>61,253</b>	59,387	60,099	60,155	60,205
Americas	<b>20,770</b>	20,522	20,816	20,951	21,317
<i>of which: USA</i>	<b>19,944</b>	19,695	19,897	19,715	20,037
Asia Pacific	<b>8,959</b>	7,539	7,539	7,385	7,116
Europe, Middle East and Africa	<b>11,097</b>	10,746	10,505	10,254	10,052
<i>of which: UK</i>	<b>5,274</b>	5,206	5,373	5,425	5,595
<i>of which: rest of Europe</i>	<b>5,662</b>	5,373	4,957	4,663	4,303
<i>of which: Middle East and Africa</i>	<b>161</b>	167	176	166	153
Switzerland	<b>20,427</b>	20,581	21,238	21,564	21,720
Market capitalization <sup>12</sup>	<b>69,125</b>	61,420	75,147	63,526	65,007
Total book value per share (CHF) <sup>12</sup>	<b>13.76</b>	14.44	14.75	13.94	12.74
Tangible book value per share (CHF) <sup>12</sup>	<b>12.04</b>	12.68	13.00	12.14	11.07
Registered ordinary shares (number) <sup>13</sup>	<b>3,853,096,603</b>	3,850,766,389	3,849,731,535	3,717,128,324	3,842,002,069
Treasury shares (number) <sup>12</sup>	<b>132,301,550</b>	138,441,772	98,706,275	87,871,737	73,800,252

<sup>1</sup> Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. <sup>2</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>3</sup> Return on assets was removed from the key performance indicator framework in 2017 and is therefore only presented for comparative periods prior to 2017. <sup>4</sup> Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. <sup>5</sup> Based on the Swiss systemically relevant bank (SRB) framework. Refer to the "Capital management" section of this report for more information. <sup>6</sup> From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. <sup>7</sup> Based on the revised Swiss SRB framework that became effective on 1 July 2016. Refer to the "Capital management" section of this report for more information. <sup>8</sup> Calculated in accordance with the former Swiss SRB rules. Refer to the "Capital management" section of our Annual Report 2016 for more information. <sup>9</sup> Calculated as operating income before credit loss / average fully applied risk-weighted assets and average fully applied leverage ratio denominator, respectively. <sup>10</sup> Includes invested assets for Personal & Corporate Banking. <sup>11</sup> Certain account types were corrected during 2017. As a result, invested assets were corrected by CHF 12 billion as of 31 December 2016, CHF 11 billion as of 31 December 2015, CHF 11 billion as of 31 December 2014 and CHF 9 billion as of 31 December 2013. <sup>12</sup> Refer to "UBS shares" in the "Capital management" section of this report for more information. <sup>13</sup> Share information as of 31 December 2014 relates to UBS AG shares. Numbers presented for periods other than 31 December 2014 relate to UBS Group AG shares. Refer to "UBS shares" in the "Capital management" section of this report for more information on UBS Group AG shares.

## Income statement data

CHF million, except where indicated	For the year ended				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
Interest income	14,193	13,787	13,177	13,194	13,137
Interest expense	(7,665)	(7,373)	(6,445)	(6,639)	(7,351)
Net interest income	6,528	6,413	6,732	6,555	5,786
Credit loss (expense) / recovery	(128)	(37)	(117)	(78)	(50)
Net interest income after credit loss expense	6,400	6,376	6,615	6,477	5,736
Net fee and commission income	17,186	16,397	17,140	17,076	16,287
Net trading income	4,972	4,948	5,742	3,842	5,130
Other income	509	599	1,107	632	580
Total operating income	29,067	28,320	30,605	28,027	27,732
Total operating expenses	23,800	24,230	25,116	25,567	24,461
<b>Operating profit / (loss) before tax</b>	<b>5,268</b>	<b>4,090</b>	<b>5,489</b>	<b>2,461</b>	<b>3,272</b>
Tax expense / (benefit)	4,139	805	(898)	(1,180)	(110)
<b>Net profit / (loss)</b>	<b>1,128</b>	<b>3,286</b>	<b>6,386</b>	<b>3,640</b>	<b>3,381</b>
Net profit / (loss) attributable to preferred noteholders				142	204
Net profit / (loss) attributable to non-controlling interests	76	82	183	32	5
<b>Net profit / (loss) attributable to shareholders</b>	<b>1,053</b>	<b>3,204</b>	<b>6,203</b>	<b>3,466</b>	<b>3,172</b>
Cost / income ratio (%) <sup>1</sup>	81.5	85.4	81.8	91.0	88.0
<b>Per share data (CHF)</b>					
Basic earnings per share <sup>2</sup>	0.28	0.86	1.68	0.93	0.84
Diluted earnings per share <sup>2</sup>	0.27	0.84	1.64	0.91	0.83
Ordinary cash dividends declared per share (CHF) <sup>3,4</sup>	0.65	0.60	0.60	0.50	0.25
Ordinary cash dividends declared per share (USD) <sup>3,4</sup>		0.61	0.62	0.54	0.28
Special cash dividends declared per share (CHF) <sup>3,4</sup>			0.25	0.25	
Special cash dividends declared per share (USD) <sup>3,4</sup>			0.26	0.26	
Dividend payout ratio (%)	241	71	52	55 <sup>5</sup>	30
<b>Rates of return (%)</b>					
Return on equity attributable to shareholders	2.0	5.9	11.8	7.0	6.7
Return on average equity	2.0	5.9	11.8	7.0	6.7
Return on average assets	0.1	0.3	0.6	0.3	0.3

<sup>1</sup> Calculated as operating expenses / operating income before credit loss expense. <sup>2</sup> Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. <sup>3</sup> Dividends and / or distribution of the capital contribution reserve are normally approved and paid in the year subsequent to the reporting period. <sup>4</sup> Refer to "Proposed dividend distribution out of capital contribution reserve" in the UBS Group AG standalone financial statements for more information. <sup>5</sup> The calculation of the dividend payout ratio for the year ended 31 December 2014 excludes the supplementary distribution of a dividend upon the completion of the acquisition of all shares in UBS AG by means of the SESTA procedure. Refer to the Annual Report 2015 for more information on the SESTA procedure.

## Cash dividends received from investments in subsidiaries

In 2017, UBS Group AG received cash dividends of CHF 2,260 million (2016: CHF 3,434 million; 2015: CHF 2,869 million) from its subsidiaries, almost entirely due to a dividend of CHF 2,250 million from UBS AG.

**Balance sheet data**

<i>CHF million</i>	<b>31.12.17</b>	31.12.16	31.12.15	31.12.14	31.12.13
<b>Assets</b>					
Total assets	<b>915,642</b>	935,016	942,819	1,062,478	1,013,355
Cash and balances with central banks	<b>87,775</b>	107,767	91,306	104,073	80,879
Due from banks	<b>13,739</b>	13,156	11,948	13,334	13,874
Cash collateral on securities borrowed	<b>12,393</b>	15,111	25,584	24,063	27,496
Reverse repurchase agreements	<b>77,240</b>	66,246	67,893	68,414	91,563
Trading portfolio assets	<b>130,707</b>	96,575	124,035	138,156	122,848
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	<b>35,363</b>	30,260	51,943	56,018	42,449
Positive replacement values	<b>118,227</b>	158,411	167,435	256,978	254,084
Cash collateral receivables on derivative instruments	<b>23,434</b>	26,664	23,763	30,979	26,548
Loans	<b>319,568</b>	306,325	311,954	315,757	286,959
Financial assets designated at fair value	<b>58,933</b>	65,353	6,146	4,951	7,364
Financial assets available for sale	<b>8,665</b>	15,676	62,543	57,159	59,525
Financial assets held to maturity	<b>9,166</b>	9,289			
Other assets	<b>29,706</b>	25,436	22,160	22,988	20,228
<b>Liabilities</b>					
Due to banks	<b>7,533</b>	10,645	11,836	10,492	12,862
Cash collateral on securities lent	<b>1,789</b>	2,818	8,029	9,180	9,491
Repurchase agreements	<b>15,255</b>	6,612	9,653	11,818	13,811
Trading portfolio liabilities	<b>30,463</b>	22,824	29,137	27,958	26,609
Negative replacement values	<b>116,133</b>	153,810	162,430	254,101	248,079
Cash collateral payables on derivative instruments	<b>30,247</b>	35,472	38,282	42,372	44,507
Due to customers	<b>408,999</b>	423,672	390,185	410,207	390,825
Financial liabilities designated at fair value	<b>54,202</b>	55,017	62,995	75,297	69,901
Debt issued	<b>139,551</b>	103,649	93,147	91,207	81,586
Other liabilities	<b>57,064</b>	62,020	75,652	71,112	62,777
Equity attributable to shareholders	<b>51,214</b>	53,621	55,313	50,608	48,002



## C – Information on the company

### **Property, plant and equipment**

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As of 31 December 2017, UBS operated about 801 business and banking locations worldwide, of which approximately 41% were in Switzerland, 41% in the Americas, 10% in the rest of Europe, Middle East and Africa and 8% in Asia Pacific. Of the business and banking locations in Switzerland, 34% were owned directly

by UBS, with the remainder, along with most of UBS's offices outside Switzerland, being held under commercial leases. These premises are subject to continuous maintenance and upgrading and are considered suitable and adequate for current and anticipated operations.

## D – Information required by industry guide 3

### **Selected statistical information**

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The following tables set forth select statistical information regarding the Group's banking operations extracted from the financial statements. Unless otherwise indicated, average balances for the years ended 31 December 2017, 31 December 2016 and 31 December 2015 are calculated from monthly data.

The distinction between domestic (Swiss) and foreign (non-Swiss) is generally based on the booking location. For loans, this method is not significantly different from an analysis based on the domicile of the borrower.

## Average balances and interest rates

The following table sets forth average interest-earning assets and average interest-bearing liabilities, along with the average yield, for 2017, 2016 and 2015. Refer to "Note 3 Net interest and trading income" in the "Consolidated financial statements" section of this report for more information on interest income and interest expense.

	31.12.17			31.12.16			31.12.15		
	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)
<i>CHF million, except where indicated</i>									
<b>Assets</b>									
Due from banks									
Domestic	3,514	24	0.7	3,353	20	0.6	3,524	5	0.1
Foreign	10,520	28	0.3	9,623	14	0.1	10,846	61	0.6
Cash collateral on securities borrowed and reverse repurchase agreements									
Domestic	10,136	(34)	(0.3)	10,301	(22)	(0.2)	6,415	14	0.2
Foreign	157,656	791	0.5	147,873	567	0.4	138,961	614	0.4
Trading portfolio assets <sup>1</sup>									
Domestic	3,902	138	3.5	3,864	155	4.0	4,921	159	3.2
Foreign	105,421	2,413	2.3	100,701	2,310	2.3	121,542	2,912	2.4
of which: taxable	105,421	2,413	2.3	100,701	2,310	2.3	121,542	2,912	2.4
Cash collateral receivables on derivative instruments									
Domestic	757	(3)	(0.4)	487	0	0.0	249	3	1.2
Foreign	23,805	131	0.6	25,910	116	0.4	29,469	59	0.2
Loans									
Domestic	186,601	3,267	1.8	187,425	3,490	1.9	192,815	3,644	1.9
Foreign	125,682	3,071	2.4	120,518	2,694	2.2	120,692	2,510	2.1
Financial assets designated at fair value									
Domestic	14,387	26	0.2	10,934	12	0.1	710	1	0.1
Foreign	40,396	476	1.2	41,489	309	0.7	4,715	193	4.1
Financial assets available for sale									
Domestic	1,463	9	0.6	8,876	36	0.4	20,037	63	0.3
Foreign	12,235	147	1.2	17,368	164	0.9	43,131	328	0.8
of which: taxable	12,235	147	1.2	17,368	164	0.9	43,131	328	0.8
Financial assets held to maturity									
Domestic	8,250	86	1.0	4,581	52	1.1			
Foreign	788	11	1.4	65	1	1.5			
Other interest-earning assets									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign <sup>2</sup>	12,880	674	5.2	12,134	593	4.9	12,749	526	4.1
<b>Total interest-earning assets</b>	<b>718,393</b>	<b>11,255</b>	<b>1.6</b>	<b>705,502</b>	<b>10,514</b>	<b>1.5</b>	<b>710,777</b>	<b>11,092</b>	<b>1.6</b>
Net interest income on swaps		1,457 <sup>3</sup>			2,214			1,630	
Interest income on off-balance sheet securities and other		448			423			455	
<b>Interest income and average interest-earning assets</b>	<b>718,393</b>	<b>13,160<sup>4</sup></b>	<b>1.8</b>	<b>705,502</b>	<b>13,151<sup>4</sup></b>	<b>1.9</b>	<b>710,777</b>	<b>13,177</b>	<b>1.9</b>
Non-interest-earning assets									
Positive replacement values	130,263			176,567			213,913		
Fixed assets	8,512			7,982			7,154		
Other	137,309			138,322			126,767		
<b>Total average assets</b>	<b>994,477</b>			<b>1,028,373</b>			<b>1,058,611</b>		

**Average balances and interest rates (continued)**

	31.12.17			31.12.16			31.12.15		
	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)
<i>CHF million, except where indicated</i>									
<b>Liabilities and equity</b>									
Due to banks									
Domestic	7,678	14	0.2	9,030	18	0.2	9,571	11	0.1
Foreign	2,355	13	0.6	2,516	13	0.5	2,480	11	0.4
Cash collateral on securities lent and repurchase agreements									
Domestic	2,474	7	0.3	2,366	2	0.1	3,413	2	0.1
Foreign	88,239	348	0.4	76,845	318	0.4	71,129	442	0.6
Trading portfolio liabilities <sup>5</sup>									
Domestic	675	11	1.6	537	7	1.3	535	5	0.9
Foreign	28,017	1,482	5.3	30,041	1,608	5.4	31,418	1,665	5.3
Cash collateral payables on derivative instruments									
Domestic	812	1	0.1	968	4	0.4	993	1	0.1
Foreign	30,975	144	0.5	34,998	82	0.2	41,499	57	0.1
Due to customers									
Domestic	245,527	(30)	0.0	240,456	22	0.0	233,430	62	0.0
<i>of which: demand deposits</i>	<i>132,568</i>	<i>(63)</i>	<i>0.0</i>	<i>129,407</i>	<i>(44)</i>	<i>0.0</i>	<i>124,210</i>	<i>(19)</i>	<i>0.0</i>
<i>of which: savings deposits</i>	<i>103,015</i>	<i>34</i>	<i>0.0</i>	<i>98,966</i>	<i>65</i>	<i>0.1</i>	<i>96,848</i>	<i>70</i>	<i>0.1</i>
<i>of which: time deposits</i>	<i>9,944</i>	<i>(2)</i>	<i>0.0</i>	<i>12,084</i>	<i>0</i>	<i>0.0</i>	<i>12,372</i>	<i>11</i>	<i>0.1</i>
Foreign	165,471	481	0.3	167,722	304	0.2	157,496	264	0.2
Financial liabilities designated at fair value									
Domestic	2,124	13	0.6	1,632	6	0.4	2,055	6	0.3
Foreign	53,694	804	1.5	56,928	795	1.4	65,446	724	1.1
Short-term debt									
Domestic	311	(1)	(0.3)	613	1	0.2	873	4	0.5
Foreign	41,965	314	0.7	28,023	204	0.7	26,425	107	0.4
Long-term debt									
Domestic	39,512	1,422	3.6	21,788	910	4.2	18,717	720	3.8
Foreign	41,422	1,267	3.1	53,169	1,742	3.3	49,457	1,762	3.6
Other interest-bearing liabilities									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign <sup>6</sup>	31,177	310	1.0	38,620	113	0.3	39,968	58	0.1
<b>Total interest-bearing liabilities</b>	<b>782,428</b>	<b>6,601</b>	<b>0.8</b>	<b>766,252</b>	<b>6,150</b>	<b>0.8</b>	<b>754,904</b>	<b>5,899</b>	<b>0.8</b>
Swap interest on hedged debt issued		(530) <sup>3</sup>							
Interest expense on off-balance sheet securities and other		561			588			546	
<b>Interest expense and average interest-bearing liabilities</b>	<b>782,428</b>	<b>6,632<sup>7</sup></b>	<b>0.8</b>	<b>766,252</b>	<b>6,737<sup>7</sup></b>	<b>0.9</b>	<b>754,904</b>	<b>6,445</b>	<b>0.9</b>
Non-interest-bearing liabilities									
Negative replacement values	127,503			172,762			210,551		
Other	30,803			33,987			37,960		
Total liabilities	940,734			973,001			1,003,415		
Total equity	53,743			55,372			55,196		
Total average liabilities and equity	994,477			1,028,373			1,058,611		
<b>Net interest income</b>		<b>6,528</b>			<b>6,413</b>			<b>6,732</b>	
<b>Net yield on interest-earning assets</b>			<b>0.9</b>			<b>0.9</b>			<b>0.9</b>

<sup>1</sup> Interest income includes dividend income from equity instruments. <sup>2</sup> Other interest-earning assets are comprised of prime brokerage receivables, which mainly include margin lending receivables. Gross receivable and payable balances within a single prime brokerage arrangement are presented as either a net receivable or a net payable on the balance sheet. <sup>3</sup> Effective 1 January 2017, the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships was refined. As a result of this presentation change, Net interest income on swaps and Swap interest on hedged debt issued for the year ended 31 December 2017 were both lower by CHF 530 million. Prior-period information has not been restated as the effect would not have been material. Refer to "Note 1b Changes in accounting policies, comparability and other adjustments" in the "Consolidated financial statements" section of this report for more information. <sup>4</sup> For the purpose of this disclosure, negative interest income on assets is presented as a reduction to interest income, while in the consolidated income statement negative interest income on assets is presented as interest expense. Total interest income presented in the consolidated income statement was CHF 14,193 million (2016: CHF 13,787 million). <sup>5</sup> Interest expense includes expense related to dividend payment obligations. <sup>6</sup> Other interest-bearing liabilities are comprised of prime brokerage payables, which mainly include client securities financing and deposits. Gross receivable and payable balances within a single prime brokerage arrangement are presented as either a net receivable or a net payable on the balance sheet. <sup>7</sup> For the purpose of this disclosure, negative interest expense on liabilities is presented as a reduction to interest expense, while in the consolidated income statement negative interest income on liabilities is presented as interest income. Total interest expense presented in the consolidated income statement was CHF 7,665 million (2016: CHF 7,373 million).

### Average balances and interest rates (continued)

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The percentage of total average interest-earning assets attributable to foreign activities was 68% for 2017 (67% for 2016 and 68% for 2015). The percentage of total average interest-bearing liabilities attributable to foreign activities was 62% for 2017 (64% for 2016 and 64% for 2015). All assets and liabilities are translated into CHF at uniform month-end rates. Interest income and expense are translated at monthly average rates.

Average rates earned and paid on assets and liabilities can change from period to period based on the changes in interest rates in general, but are also affected by changes in the currency mix included in the assets and liabilities. This is especially true for foreign assets and liabilities. Tax-exempt income is not recorded on a tax-equivalent basis. For all three years presented, tax-exempt income is considered to be insignificant and the impact from such income is therefore negligible.

**Analysis of changes in interest income and expense**

The following tables allocate, by categories of interest-earning assets and interest-bearing liabilities, the changes in interest income and expense due to changes in volume and interest rates for the year ended 31 December 2017 compared with the year ended 31 December 2016, and for the year ended 31 December

2016 compared with the year ended 31 December 2015. Volume and rate variances have been calculated on movements in average balances and changes in interest rates. Changes due to a combination of volume and rates have been allocated proportionally.

	2017 compared with 2016			2016 compared with 2015		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<i>CHF million</i>						
<b>Interest income from interest-earning assets</b>						
Due from banks						
Domestic	1	3	4	0	16	16
Foreign	1	13	14	(7)	(40)	(47)
Cash collateral on securities borrowed and reverse repurchase agreements						
Domestic	0	(12)	(12)	8	(44)	(36)
Foreign	39	185	224	36	(83)	(47)
Trading portfolio assets						
Domestic	2	(19)	(17)	(34)	30	(4)
Foreign	109	(6)	103	(500)	(102)	(602)
<i>of which: taxable</i>	<i>109</i>	<i>(6)</i>	<i>103</i>	<i>(500)</i>	<i>(102)</i>	<i>(602)</i>
Cash collateral receivables on derivative instruments						
Domestic	0	(2)	(2)	3	(6)	(3)
Foreign	(8)	22	14	(7)	64	57
Loans						
Domestic	(16)	(208)	(224)	(102)	(52)	(154)
Foreign	114	262	376	(4)	189	185
Financial assets designated at fair value						
Domestic	3	11	14	10	1	11
Foreign	(8)	175	167	1,508	(1,392)	116
Financial assets available for sale						
Domestic	(30)	4	(26)	(33)	6	(27)
Foreign	(46)	28	(18)	(206)	42	(164)
<i>of which: taxable</i>	<i>(46)</i>	<i>28</i>	<i>(18)</i>	<i>(206)</i>	<i>42</i>	<i>(164)</i>
Financial assets held to maturity						
Domestic	40	(6)	34	52	0	52
Foreign	11	0	11	1	0	1
Other interest-bearing assets						
Domestic	0	0	0	0	0	0
Foreign	37	43	80	(25)	93	68
Interest income						
Domestic	0	(230)	(230)	(96)	(50)	(145)
Foreign	249	722	971	796	(1,229)	(433)
Total interest income from interest-earning assets						
	249	493	742	700	(1,279)	(578)
Net interest income on swaps						
			(758)			584
Interest income on off-balance sheet securities and other						
			25			(32)
<b>Total interest income</b>						
			9			(26)

## Analysis of changes in interest income and expense (continued)

CHF million	2017 compared with 2016			2016 compared with 2015		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<b>Interest expense on interest-bearing liabilities</b>						
Due to banks						
Domestic	(3)	(1)	(4)	(1)	8	7
Foreign	(1)	1	0	0	2	2
Cash collateral on securities lent and repurchase agreements						
Domestic	0	5	5	(1)	2	1
Foreign	46	(16)	30	34	(159)	(125)
Trading portfolio liabilities						
Domestic	2	2	4	0	2	2
Foreign	(109)	(17)	(126)	(73)	15	(58)
Cash collateral payables on derivative instruments						
Domestic	(1)	(2)	(3)	0	4	4
Foreign	(8)	69	61	(7)	32	25
Due to customers						
Domestic	4	(56)	(52)	2	(42)	(40)
<i>of which: demand deposits</i>	0	(19)	(19)	0	(25)	(25)
<i>of which: savings deposits</i>	4	(35)	(31)	2	(7)	(5)
<i>of which: time deposits</i>	0	(2)	(2)	0	(10)	(10)
Foreign	(5)	182	177	20	20	40
Financial liabilities designated at fair value						
Domestic	2	5	7	(1)	1	0
Foreign	(45)	54	9	(94)	165	71
Short-term debt						
Domestic	(1)	0	(1)	(1)	(2)	(3)
Foreign	98	12	110	6	92	98
Long-term debt						
Domestic	744	(233)	511	117	73	190
Foreign	(388)	(87)	(475)	134	(153)	(19)
Other interest-bearing liabilities						
Domestic	0	0	0	0	0	0
Foreign	(22)	220	198	(1)	56	55
Interest expense						
Domestic	747	(280)	467	115	46	161
Foreign	(434)	418	(16)	19	71	90
Total interest expense on interest-bearing liabilities	313	138	451	134	117	251
Swap interest on hedged debt issued			(530)			
Interest expense on off-balance sheet securities and other			(26)			42
<b>Total interest expense</b>			<b>(105)</b>			<b>293</b>

## Deposits

The following table analyzes average deposits and average rates on each deposit category listed below for the years ended 31 December 2017, 2016 and 2015. The geographic allocation is based on the location of the office or branch where the deposit

is made. Deposits by foreign depositors in domestic offices were CHF 65,928 million, CHF 76,749 million and CHF 72,532 million at 31 December 2017, 31 December 2016 and 31 December 2015, respectively.

	31.12.17		31.12.16		31.12.15	
	Average deposits	Average rate (%)	Average deposits	Average rate (%)	Average deposits	Average rate (%)
<i>CHF million, except where indicated</i>						
<b>Banks</b>						
<b>Domestic offices</b>						
Demand deposits	3,943	(0.5)	5,046	(0.3)	5,261	(0.2)
Time deposits	3,735	0.9	3,984	0.8	4,310	0.5
Total domestic offices	7,678	0.2	9,030	0.2	9,571	0.1
<b>Foreign offices</b>						
Interest-bearing deposits	2,355	0.6	2,339	0.5	2,437	0.4
<b>Total due to banks<sup>1</sup></b>	<b>10,033</b>	<b>0.3</b>	<b>11,369</b>	<b>0.3</b>	<b>12,007</b>	<b>0.2</b>
<b>Customer accounts</b>						
<b>Domestic offices</b>						
Demand deposits	132,568	0.0	129,407	0.0	124,210	0.0
Savings deposits	103,015	0.0	98,966	0.1	96,848	0.1
Time deposits	9,944	0.0	12,084	0.0	12,372	0.1
Total domestic offices	245,527	0.0	240,456	0.0	233,430	0.0
<b>Foreign offices</b>						
Demand deposits	58,975	0.1	55,617	0.0	52,404	0.0
Time and savings deposits	106,495	0.4	112,105	0.3	105,091	0.2
Total foreign offices	165,471	0.3	167,722	0.2	157,496	0.2
<b>Total due to customers</b>	<b>410,997</b>	<b>0.1</b>	<b>408,178</b>	<b>0.1</b>	<b>390,925</b>	<b>0.1</b>

<sup>1</sup> Due to banks is considered to represent short-term borrowings to the extent that the total Due to banks exceeds total Due from banks, without differentiating between domestic and foreign offices. The remainder of total Due to banks is considered to represent deposits for the purpose of this disclosure.

As of 31 December 2017, the maturity of time deposits was as follows:

<i>CHF million</i>	Domestic	Foreign
Within 3 months	9,026	45,751
3 to 6 months	666	1,591
6 to 12 months	529	2,253
1 to 5 years	113	576
Over 5 years	48	22
<b>Total time deposits</b>	<b>10,382</b>	<b>50,194</b>



## Short-term borrowings

The table below presents the period-end, average and maximum month-end outstanding amounts for short-term borrowings, along with average and period-end interest rates.

CHF million, except where indicated	Short-term debt <sup>1</sup>			Due to banks <sup>2</sup>			Repurchase agreements <sup>3</sup>		
	31.12.17	31.12.16	31.12.15	31.12.17	31.12.16	31.12.15	31.12.17	31.12.16	31.12.15
Period-end balance	50,953	26,178	21,215	0	0	0	92,057	78,083	71,775
Average balance	42,276	28,636	27,298	0	176	44	87,532	73,876	65,118
Maximum month-end balance	55,720	32,040	31,911	0	2,293	570	106,601	82,858	80,372
Average interest rate during the period (%)	0.7	0.7	0.4	0.0	0.3	0.2	0.2	0.0	0.3
Average interest rate at period end (%)	0.7	0.9	0.5	0.0	0.0	0.0	0.2	(0.1)	0.2

<sup>1</sup> Short-term debt is comprised of certificates of deposit, commercial paper, acceptances and promissory notes, and other money market paper reported within Debt issued (held at amortized cost). <sup>2</sup> Amounts due to banks are presented net of amounts due from banks in order to reflect short-term borrowings. The difference between the gross Due to banks amount and the amount disclosed here is presented as deposits from banks on the preceding page. <sup>3</sup> Repurchase agreements are presented on a gross basis and therefore, for the purpose of this disclosure, do not reflect the effect of netting permitted under IFRS.

## Debt instruments designated at fair value, available for sale and held to maturity

The table below presents the carrying value and yield of debt instruments designated at fair value, available for sale and held to maturity by contractual maturity bucket. The maturity information presented does not consider any early redemption features and debt instruments without fixed maturities are not included.

CHF million, except percentages	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
<b>Financial assets designated at fair value</b>									
Swiss national government and agencies	901	(0.25)							901
US Treasury and agencies	8,494	1.20	3,261	1.64	2	1.51			11,757
Foreign governments and official institutions	17,759	0.27	7,420	1.04	320	0.12			25,499
Corporate debt securities	2,513	0.12	6,216	1.03	542	0.16			9,272
Mortgage-backed securities							84	1.62	84
<b>Subtotal as of 31 December 2017</b>	<b>29,667</b>		<b>16,898</b>		<b>864</b>		<b>84</b>		<b>47,512</b>
<b>Financial assets available for sale</b>									
Swiss national government and agencies					1	4.00			1
US Treasury and agencies	848	0.57	1,697	1.24	143	0.70			2,689
Foreign governments and official institutions	354	3.86	76	2.43					430
Corporate debt securities	382	1.06	497	0.97	51	0.18			929
Mortgage-backed securities			0	1.42	602	1.35	3,278	1.53	3,880
<b>Subtotal as of 31 December 2017</b>	<b>1,584</b>		<b>2,269</b>		<b>797</b>		<b>3,278</b>		<b>7,928</b>
<b>Financial assets held to maturity</b>									
US Treasury and agencies			1,782	1.32	3,051	1.71			4,833
Foreign governments and official institutions	1,870	(0.08)	773	1.35					2,643
Corporate debt securities	729	0.95	960	1.41					1,689
<b>Subtotal as of 31 December 2017</b>	<b>2,600</b>		<b>3,515</b>		<b>3,051</b>		<b>0</b>		<b>9,166</b>
<b>Total as of 31 December 2017<sup>1</sup></b>	<b>33,851</b>		<b>22,682</b>		<b>4,712</b>		<b>3,362</b>		<b>64,606</b>

**Debt instruments designated at fair value, available for sale and held to maturity (continued)**

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
<i>CHF million, except percentages</i>									
<b>Financial assets designated at fair value</b>									
Swiss national government and agencies	1,761	(0.23)							1,761
US Treasury and agencies	14,719	0.49	6,686	0.82	2	1.38			21,406
Foreign governments and official institutions	15,590	0.06	12,803	0.24	270	0.58			28,664
Corporate debt securities	2,287	0.56	6,213	0.82	320	0.29			8,820
Mortgage-backed securities							103	1.65	103
<b>Subtotal as of 31 December 2016</b>	<b>34,356</b>		<b>25,702</b>		<b>592</b>		<b>103</b>		<b>60,754</b>
<b>Financial assets available for sale</b>									
Swiss national government and agencies					1	4.00			1
US Treasury and agencies	1,616	0.31	2,782	0.94					4,398
Foreign governments and official institutions	2,230	1.21	1,624	0.66	15	0.32			3,869
Corporate debt securities	1,239	0.50	1,920	0.56	50	0.18	5	0.00	3,215
Mortgage-backed securities			0	5.52	0	1.96	3,380	1.65	3,381
<b>Subtotal as of 31 December 2016</b>	<b>5,085</b>		<b>6,326</b>		<b>68</b>		<b>3,385</b>		<b>14,864</b>
<b>Financial assets held to maturity</b>									
US Treasury and agencies	406	0.59	1,137	1.04	3,145	1.59			4,688
Foreign governments and official institutions	975	(0.54)	1,753	0.85					2,728
Corporate debt securities	245	0.89	1,629	1.15					1,873
<b>Subtotal as of 31 December 2016</b>	<b>1,626</b>		<b>4,519</b>		<b>3,145</b>		<b>0</b>		<b>9,289</b>
<b>Total as of 31 December 2016<sup>1</sup></b>	<b>41,067</b>		<b>36,547</b>		<b>3,805</b>		<b>3,488</b>		<b>84,908</b>
<b>Financial assets available for sale</b>									
Swiss national government and agencies	701	(0.83)			1	4.00			702
US Treasury and agencies	11,171	0.39	6,856	1.29					18,027
Foreign governments and official institutions	13,966	0.21	11,049	0.64	104	1.33			25,119
Corporate debt securities	6,062	0.42	8,118	0.87	264	1.27			14,443
Mortgage-backed securities			0	5.20			3,396	1.74	3,396
<b>Total as of 31 December 2015<sup>1</sup></b>	<b>31,900</b>		<b>26,023</b>		<b>369</b>		<b>3,396</b>		<b>61,688</b>

<sup>1</sup> Includes investments in debt instruments as of 31 December 2017 issued by US government and government agencies of CHF 23,159 million (31 December 2016: CHF 33,873 million, 31 December 2015: CHF 21,424 million), the German government of CHF 6,865 million (31 December 2016: CHF 11,961 million, 31 December 2015: CHF 8,583 million) and the French government of CHF 5,944 million (31 December 2016: CHF 4,019 million, 31 December 2015: CHF 3,566 million).

## Due from banks and loans by industry (gross)

The Group's lending portfolio is widely diversified across industry sectors. CHF 192 billion (57% of the total) consists of loans to thousands of private households, predominantly in Switzerland, and mostly secured by mortgages, financial collateral or other assets. Exposure to banks and financial institutions amounted to CHF 78 billion (23% of the total). Exposure to banks includes money market deposits with highly rated institutions. Excluding banks and financial institutions, the largest industry sector exposure as of 31 December 2017 was CHF 22 billion (6% of the total) to Services. For further discussion of the loan portfolio,

refer to the "Risk management and control" section of this report.

The table below illustrates the diversification of the loan portfolio among industry sectors. The industry categories presented are consistent with the classification of loans for reporting to the Swiss Financial Market Supervisory Authority (FINMA) and the Swiss National Bank. Loans designated at fair value and loans held in the trading portfolio are excluded from the tables below.

CHF million	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Domestic</b>					
Banks	705	778	538	1,157	736
Chemicals	426	262	308	392	382
Construction	1,430	1,479	1,520	1,418	1,429
Electricity, gas and water supply	207	201	234	260	255
Financial services	5,132	5,140	5,325	6,466	4,643
Food and beverages	435	220	208	206	241
Hotels and restaurants	1,498	1,555	1,647	1,696	1,817
Manufacturing	2,272	2,000	2,012	2,319	2,512
Mining	14	19	23	34	36
Private households	124,368	123,745	123,967	125,461	124,569
Public authorities	1,026	1,364	1,609	2,098	2,415
Real estate and rentals	12,415	12,805	13,707	14,549	14,511
Retail and wholesale	4,018	4,008	3,687	4,169	3,784
Services	4,924	5,402	5,250	4,794	5,330
Transport, storage and communication	1,824	1,919	1,876	1,964	2,013
Other	731	708	697	732	753
<b>Total domestic</b>	<b>161,426</b>	<b>161,603</b>	<b>162,609</b>	<b>167,713</b>	<b>165,426</b>
<b>Foreign</b>					
Banks	13,037	12,381	11,413	12,190	13,201
Chemicals	60	141	113	75	178
Construction	817	550	635	645	1,132
Electricity, gas and water supply	674	587	706	1,100	1,337
Financial services	58,728	50,264	56,375	57,645	43,125
Food and beverages	58	69	65	56	63
Hotels and restaurants	1,456	171	148	120	181
Manufacturing	1,820	1,714	1,958	1,961	1,850
Mining	1,011	1,007	1,466	1,345	1,175
Private households	67,501	62,598	62,695	60,466	49,920
Public authorities	2,207	2,551	1,272	1,413	1,322
Real estate and rentals	3,132	2,066	2,213	2,517	2,995
Retail and wholesale	2,590	2,223	1,975	1,924	1,791
Services	16,740	19,498	17,929	17,470	14,733
Transport, storage and communication	2,159	2,440	2,858	3,017	2,809
Other	552	217	163	142	362
<b>Total foreign</b>	<b>172,540</b>	<b>158,477</b>	<b>161,985</b>	<b>162,086</b>	<b>136,174</b>
<b>Total gross</b>	<b>333,967</b>	<b>320,080</b>	<b>324,594</b>	<b>329,800</b>	<b>301,601</b>

### Due from banks and loans – mortgages (gross)

The table below provides more information on the Group's mortgage portfolio by client domicile and type of mortgage. Mortgages are included in the industry categories in the table on the previous page.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Mortgages</b>					
Domestic	141,613	142,040	144,230	146,637	144,852
Foreign	21,535	19,921	18,887	18,112	15,235
<b>Total gross mortgages</b>	<b>163,148</b>	161,961	163,117	164,748	160,086

<b>Mortgages</b>					
Residential	144,431	142,197	141,608	142,380	137,370
Commercial	18,717	19,765	21,509	22,368	22,716
<b>Total gross mortgages</b>	<b>163,148</b>	161,961	163,117	164,748	160,086

### Due from banks and loans – maturity profile (gross)

The table below provides the maturity profile of loans and amounts due from banks. The maturity information presented does not consider any early redemption features.

<i>CHF million</i>	Within 1 year	1 to 5 years	Over 5 years	Total
<b>Domestic</b>				
Banks	705	0	0	705
Mortgages	53,422	57,149	31,042	141,613
Other loans	12,585	5,182	1,342	19,109
<b>Total domestic</b>	66,711	62,331	32,385	161,426
<b>Foreign</b>				
Banks	12,924	91	23	13,037
Mortgages	4,128	5,414	11,993	21,535
Other loans	116,142	19,012	2,815	137,969
<b>Total foreign</b>	133,193	24,516	14,830	172,540
<b>Total gross</b>	199,904	86,847	47,215	333,967

As of 31 December 2017, total loans and amounts due from banks granted at fixed and floating interest rates were as follows:

<i>CHF million</i>	Within 1 year	1 to 5 years	Over 5 years	Total
Fixed-rate loans	139,698	67,057	35,204	241,958
Adjustable or floating-rate loans	60,206	19,790	12,012	92,008
<b>Total</b>	199,904	86,847	47,215	333,967

## Impaired and non-performing loans

A loan (included in Due from banks or Loans) is classified as non-performing: (i) when the payment of interest, principal or fees is overdue by more than 90 days, or more than 180 days for certain specified retail portfolios, (ii) when bankruptcy or insolvency proceedings have commenced or (iii) when obligations have been restructured on preferential terms. For IFRS reporting purposes, the definition of impaired loans is more comprehensive, covering both non-performing loans and other situations where objective evidence indicates that UBS may be

unable to collect all amounts due. Refer to "Impaired loans" in the "Risk management and control" section of this report for comprehensive information on UBS's impaired loans, of which non-performing loans are a component. Also, refer to Note 1 to the consolidated financial statements for more information on the various risk factors that are considered to be indicative of impairment.

The table below provides an analysis of the Group's non-performing loans.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Non-performing loans:</b>					
Domestic	1,339	1,524	1,174	1,293	1,113
Foreign	756	875	455	309	469
<b>Total non-performing loans</b>	<b>2,095</b>	<b>2,399</b>	<b>1,630</b>	<b>1,602</b>	<b>1,582</b>

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Gross interest income not collected on non-performing loans:<sup>1</sup></b>					
Domestic	8	5	6	9	6
Foreign	26	22	7	6	4
<b>Interest income included in Net profit for non-performing loans:</b>					
Domestic	33	36	26	22	23
Foreign	6	10	5	7	7

<sup>1</sup> Based on application of effective interest rate method to loan balances net of credit losses under IAS 39.

Under imminent payment default or where default has already occurred, we sometimes restructure claims by providing concessions that we would otherwise not consider and that are outside of our normal risk appetite, such as preferential interest rates, extension of maturity, modifying the schedule of repayments, debt/equity swap and subordination. When a credit restructuring takes place, each case is considered individually and the exposure is classified as defaulted and assessed for impairment. It will remain so, until the loan is collected or written-off, non-preferential conditions are granted that

supersede the preferential conditions, or until the counterparty has recovered and the preferential conditions no longer exceed our risk appetite. Contractual adjustments when there is no evidence of imminent payment default, or where changes to terms and conditions are within our usual risk appetite, are not considered to be a credit restructuring.

Gross interest income not collected that relates to restructured non-performing loans was not material to the results of operations in 2017, 2016, 2015, 2014 or 2013.

## Cross-border outstandings

Cross-border outstandings consist of balances with central banks and other financial institutions, loans, reverse repurchase agreements and cash collateral on securities borrowed with counterparties domiciled outside Switzerland. Guarantees and commitments are provided separately in the table below.

The following tables list those countries for which cross-border outstandings exceeded 0.75% of total IFRS assets at 31 December 2017, 2016 and 2015. As of 31 December 2017, there were no outstandings that exceeded 0.75% of total IFRS assets in any country currently facing debt restructuring or

liquidity problems that the Group expects would materially impact the country's ability to service its obligations. Aggregate country risk exposures are monitored and reported on an ongoing basis. The internal risk view is not directly comparable to the cross-border outstandings in the table below due to different approaches to netting, differing trade populations and differing approach to allocation of exposures to countries. For more information on the country framework within risk control, refer to the "Risk management and control" section of this report.

31.12.17

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and commitments <sup>1</sup>
USA	21,278	87,401	15,930	124,610	13.6	23,218
UK	2,283	53,177	6,397	61,857	6.8	12,143
Japan	1,682	8,144	8,918	18,743	2.0	80
Germany	1,477	8,274	9,109	18,860	2.1	1,340
France	2,453	5,694	5,013	13,160	1.4	5,851
Hong Kong	606	16,421	328	17,355	1.9	431
Singapore	165	4,405	2,960	7,529	0.8	509

31.12.16

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and commitments <sup>1</sup>
USA	19,652	78,947	22,859	121,458	13.0	36,017
UK	2,595	48,246	9,767	60,608	6.5	10,356
Japan	5,197	5,671	9,165	20,033	2.1	237
Germany	699	4,973	13,063	18,735	2.0	1,513
France	2,385	5,641	2,871	10,897	1.2	4,265
Hong Kong	417	8,171	349	8,937	1.0	154

31.12.15

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and commitments <sup>1</sup>
USA	8,633	90,201	27,807	126,641	13.4	42,286
UK	4,571	56,282	9,560	70,414	7.5	6,448
Japan	3,466	11,275	5,054	19,794	2.1	136
France	4,043	3,758	681	8,482	0.9	5,029
Hong Kong	347	7,692	121	8,160	0.9	79

<sup>1</sup> Includes forward starting transactions (reverse repurchase agreements and securities borrowing agreements).

## Summary of movements in allowances and provisions for credit losses

The following table provides more information on the movements in allowances and provisions for credit losses. Refer to "Credit risk" in the "Risk management and control" section of this report for more information.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Balance at beginning of year</b>	<b>653</b>	727	735	750	794
<b>Domestic</b>					
<b>Write-offs</b>					
Construction	(5)	(1)	(2)	(1)	(2)
Electricity, gas and water supply	0	0	(1)	0	0
Financial services	(3)	(3)	(3)	0	(6)
Manufacturing	(2)	(7)	(9)	(3)	(4)
Private households	(17)	(20)	(35)	(39)	(38)
Real estate and rentals	0	0	0	(1)	0
Retail and wholesale	(10)	(10)	(47)	(28)	(11)
Services	(10)	(3)	(3)	(15)	(4)
Transport, storage and communications	(3)	(4)	(9)	(3)	(1)
<b>Total gross domestic write-offs</b>	<b>(51)</b>	(49)	(110)	(90)	(67)
<b>Foreign</b>					
<b>Write-offs</b>					
Banks	0	0	(9)	(15)	(1)
Construction	(1)	0	0	(1)	(6)
Electricity, gas and water supply	0	0	0	(1)	0
Financial services	(24)	(5)	(3)	(12)	(44)
Manufacturing	0	(21)	0	(7)	0
Mining	(16)	(25)	(1)	0	0
Private households	(21)	(8)	(12)	(6)	(6)
Public authorities	0	0	0	0	(1)
Real estate and rentals	0	0	0	(2)	(1)
Retail and wholesale	0	0	(19)	(2)	(1)
Services	(4)	(16)	(10)	(14)	0
Transport, storage and communications	0	(21)	0	(1)	0
<b>Total gross foreign write-offs</b>	<b>(66)</b>	(96)	(54)	(63)	(61)
<b>Total usage of provisions</b>	<b>0</b>	0	0	(1)	0
<b>Total write-offs / usage of provisions</b>	<b>(117)</b>	(145)	(164)	(154)	(128)
<b>Recoveries</b>					
Domestic	19	11	41	29	35
Foreign	1	11	7	0	10
<b>Total recoveries</b>	<b>20</b>	22	48	29	45
<b>Total net write-offs / usage of provisions</b>	<b>(98)</b>	(123)	(116)	(124)	(83)
Increase / (decrease) in specific allowances and provisions recognized in the income statement	124	31	117	89	144
Increase / (decrease) in collective loan loss allowances recognized in the income statement	3	6	0	(11)	(93)
Foreign currency translation	(7)	0	(11)	21	(9)
Other	37	12	2	11	(3)
<b>Balance at end of year<sup>1</sup></b>	<b>713</b>	653	727	735	750

<sup>1</sup> Includes allowances for cash collateral on securities borrowed.

**Allocation of the allowances and provisions for credit losses**

The following table provides a breakdown of allowances and provisions for credit loss by industry sector and geographic location.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Domestic</b>					
Banks	3	3	3	2	3
Chemicals	0	0	0	0	1
Construction	16	17	13	14	16
Electricity, gas and water supply	3	1	2	1	1
Financial services	23	13	17	18	16
Food and beverages	0	0	3	4	2
Hotels and restaurants	9	10	13	16	12
Manufacturing	56	60	77	72	57
Private households	45	46	47	52	54
Real estate and rentals	11	11	13	18	9
Retail and wholesale	74	67	78	123	152
Services	24	28	23	25	23
Transport, storage and communication	13	15	32	29	19
<b>Total domestic specific allowances</b>	<b>278</b>	273	321	374	365
<b>Foreign</b>					
Banks	0	0	0	10	13
Construction	0	1	1	1	17
Electricity, gas and water supply	0	0	0	0	1
Financial services	41	65	90	35	37
Manufacturing	83	7	13	9	18
Mining	50	30	46	11	2
Private households	38	59	61	65	66
Public authorities	10	11	14	14	16
Real estate and rentals	23	2	1	1	2
Retail and wholesale	83	80	80	112	77
Services	23	17	19	29	35
Transport, storage and communication	38	41	40	43	19
<b>Total foreign specific allowances</b>	<b>389</b>	314	365	330	303
Collective loan loss allowances	13	12	6	8	20
Provisions for loan commitments and guarantees	33	54	35	23	61
<b>Total allowances and provisions for credit losses</b>	<b>713</b>	653	727	735	750



## Due from banks and loans by industry sector (gross)

The table below presents the percentage of loans in each industry sector and geographic location in relation to total loans.

In %	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Domestic</b>					
Banks	0.2	0.2	0.2	0.4	0.2
Chemicals	0.1	0.1	0.1	0.1	0.1
Construction	0.4	0.5	0.5	0.4	0.5
Electricity, gas and water supply	0.1	0.1	0.1	0.1	0.1
Financial services	1.5	1.6	1.6	2.0	1.5
Food and beverages	0.1	0.1	0.1	0.1	0.1
Hotels and restaurants	0.4	0.5	0.5	0.5	0.6
Manufacturing	0.7	0.6	0.6	0.7	0.8
Private households	37.2	38.7	38.2	38.0	41.3
Public authorities	0.3	0.4	0.5	0.6	0.8
Real estate and rentals	3.7	4.0	4.2	4.4	4.8
Retail and wholesale	1.2	1.3	1.1	1.3	1.3
Services	1.5	1.7	1.6	1.5	1.8
Transport, storage and communication	0.5	0.6	0.6	0.6	0.7
Other <sup>1</sup>	0.2	0.2	0.2	0.2	0.2
<b>Total domestic</b>	<b>48.3</b>	50.5	50.1	50.9	54.8
<b>Foreign</b>					
Banks	3.9	3.9	3.5	3.7	4.4
Chemicals	0.0	0.0	0.0	0.0	0.1
Construction	0.2	0.2	0.2	0.2	0.4
Electricity, gas and water supply	0.2	0.2	0.2	0.3	0.4
Financial services	17.6	15.7	17.4	17.5	14.3
Hotels and restaurants	0.4	0.1	0.0	0.0	0.1
Manufacturing	0.5	0.5	0.6	0.6	0.6
Mining	0.3	0.3	0.5	0.4	0.4
Private households	20.2	19.6	19.3	18.3	16.6
Public authorities	0.7	0.8	0.4	0.4	0.4
Real estate and rentals	0.9	0.6	0.7	0.8	1.0
Retail and wholesale	0.8	0.7	0.6	0.6	0.6
Services	5.0	6.1	5.5	5.3	4.9
Transport, storage and communication	0.6	0.8	0.9	0.9	0.9
Other <sup>2</sup>	0.2	0.1	0.1	0.0	0.1
<b>Total foreign</b>	<b>51.7</b>	49.5	49.9	49.1	45.2
<b>Total gross</b>	<b>100.0</b>	100.0	100.0	100.0	100.0

<sup>1</sup> Includes mining. <sup>2</sup> Includes food and beverages.

# UBS AG consolidated supplemental disclosures required under SEC regulations

## A – Introduction

The following pages contain supplemental UBS AG disclosures that are required under SEC regulations. UBS AG's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and are denominated in Swiss francs (CHF), which is also the functional currency of UBS AG's Head Office and its Swiss-based operations.

## B – Selected financial data

The tables below provide information about the noon purchase rates for the Swiss franc, expressed in United States dollars, or USD, per one Swiss franc. The noon purchase rate is the rate in New York City for cable transfers in foreign currencies as

certified for customs purposes by the Federal Reserve Bank of New York.

On 28 February 2018, the noon purchase rate was 1.0604 USD per 1 CHF.

For the year ended 31 December	High	Low	Average rate (USD per 1 CHF) <sup>1</sup>	At period end
2013	1.1292	1.0190	1.0826	1.1231
2014	1.1478	1.0066	1.0893	1.0066
2015	1.1781	0.9704	1.0368	0.9983
2016	1.0487	0.9677	1.0128	0.9843
2017	1.0575	0.9741	1.0205	1.0269
For the month ended	High	Low		
30 September 2017	1.0575	1.0262		
31 October 2017	1.0275	1.0010		
30 November 2017	1.0217	0.9986		
31 December 2017	1.0269	1.0073		
31 January 2018	1.0728	1.0171		
28 February 2018	1.0832	1.0595		

<sup>1</sup> Calculated using the average of the noon purchase rates on the last business day of each full month during the relevant period.

**Key figures**

CHF million, except where indicated	As of or for the year ended				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Results</b>					
Operating income	29,479	28,421	30,605	28,026	27,732
Operating expenses	24,481	24,352	25,198	25,557	24,461
Operating profit / (loss) from continuing operations before tax	4,998	4,069	5,407	2,469	3,272
Net profit / (loss) attributable to shareholders	845	3,207	6,235	3,502	3,172
<b>Key performance indicators<sup>1</sup></b>					
<b>Profitability</b>					
Return on tangible equity (%)	2.0	6.9	13.5	8.2	8.0
Return on assets, gross (%) <sup>2</sup>		3.0	3.1	2.8	2.5
Cost / income ratio (%)	82.7	85.6	82.0	90.9	88.0
<b>Growth</b>					
Net profit growth (%)	(73.7)	(48.6)	78.0	10.4	
Net new money growth for combined wealth management businesses (%) <sup>3</sup>	2.1	2.1	2.2	2.5	3.4
<b>Resources</b>					
Common equity tier 1 capital ratio (fully applied, %) <sup>4</sup>	14.0	14.5	15.4	14.2	12.8
Common equity tier 1 leverage ratio (fully applied, %) <sup>4,5</sup>	3.7	3.7	3.6	3.1	2.8
Going concern leverage ratio (fully applied, %) <sup>6</sup>	4.2	4.2			
Leverage ratio (phase-in, %) <sup>5,7</sup>			5.7	5.4	4.7
<b>Additional information</b>					
<b>Profitability</b>					
Return on equity (RoE) (%)	1.6	5.9	11.7	7.0	6.7
Return on risk-weighted assets, gross (%) <sup>8</sup>	12.8	13.2	14.3	12.6	11.6
Return on leverage ratio denominator, gross (%) <sup>8</sup>	3.4	3.2			
<b>Resources</b>					
Total assets	916,363	935,353	943,256	1,062,327	1,013,355
Equity attributable to shareholders	50,718	53,662	55,248	52,108	48,002
Common equity tier 1 capital (fully applied) <sup>4</sup>	33,240	32,447	32,042	30,805	28,908
Common equity tier 1 capital (phase-in) <sup>4</sup>	36,042	39,474	41,516	44,090	42,179
Risk-weighted assets (fully applied) <sup>4</sup>	236,606	223,232	208,186	217,158	225,153
Risk-weighted assets (phase-in) <sup>4</sup>	237,456	225,743	212,609	221,150	228,557
Common equity tier 1 capital ratio (phase-in, %) <sup>4</sup>	15.2	17.5	19.5	19.9	18.5
Going concern capital ratio (fully applied, %) <sup>6</sup>	15.6	16.3			
Total capital ratio (fully applied, %) <sup>7</sup>			21.0	19.0	15.4
Going concern capital ratio (phase-in, %) <sup>6</sup>	19.5	22.6			
Total capital ratio (phase-in, %) <sup>7</sup>			24.9	25.6	22.2
Going concern loss-absorbing capacity ratio (fully applied, %) <sup>6</sup>	15.8	13.3			
Leverage ratio denominator (fully applied) <sup>4,5</sup>	887,189	870,942	898,251	999,124	1,015,306
Leverage ratio denominator (phase-in) <sup>4,5</sup>	888,687	875,325	904,518	1,006,001	1,022,924
Leverage ratio (fully applied, %) <sup>5,7</sup>			4.9	4.1	3.4
Going concern leverage ratio (phase-in, %) <sup>6</sup>	5.2	5.8			
Going concern leverage ratio (fully applied, %) <sup>6</sup>	4.2	3.4			
Average equity / average assets ratio (%)	5.3	5.3	5.0	4.8	4.0

## Key figures (continued)

CHF million, except where indicated	As of or for the year ended				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Other</b>					
Invested assets (CHF billion) <sup>9,10</sup>	3,179	2,810	2,678	2,723	2,381
Personnel (full-time equivalents)	46,009	56,208	58,131	60,155	60,205
Americas	20,770	20,522	20,816	20,951	21,317
<i>of which: USA</i>	19,944	19,695	19,897	19,715	20,037
Asia Pacific	6,891	6,633	7,348	7,385	7,116
Europe, Middle East and Africa	8,249	8,473	8,730	10,254	10,052
<i>of which: UK</i>	5,274	5,206	5,373	5,425	5,595
<i>of which: rest of Europe</i>	2,814	3,100	3,181	4,663	4,303
<i>of which: Middle East and Africa</i>	161	167	176	166	153
Switzerland	10,098	20,581	21,238	21,564	21,720
Registered ordinary shares (number)	3,858,408,466	3,858,408,466	3,858,408,466	3,844,560,913	3,842,002,069
Treasury shares (number)	0	0	0	2,115,255	73,800,252

<sup>1</sup> Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. <sup>2</sup> Return on assets was removed from the key performance indicator framework in 2017 and is therefore only presented for comparative periods prior to 2017. <sup>3</sup> Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. <sup>4</sup> Based on the Swiss systemically relevant bank (SRB) framework. Refer to the "Capital management" section of this report for more information. <sup>5</sup> From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. <sup>6</sup> Based on the revised Swiss SRB framework that became effective on 1 July 2016. Refer to the "Capital management" section of this report for more information. <sup>7</sup> Calculated in accordance with the former Swiss SRB rules. Refer to the "Capital management" section of our Annual Report 2016 for more information. <sup>8</sup> Calculated as operating income before credit loss / average fully applied risk-weighted assets and average fully applied leverage ratio denominator, respectively. <sup>9</sup> Includes invested assets for Personal & Corporate Banking. <sup>10</sup> Certain account types were corrected during 2017. As a result, invested assets were corrected by CHF 12 billion as of 31 December 2016, CHF 11 billion as of 31 December 2015, CHF 11 billion as of 31 December 2014 and CHF 9 billion as of 31 December 2013.

**Income statement data**

	For the year ended				
<i>CHF million, except where indicated</i>	<b>31.12.17</b>	31.12.16	31.12.15	31.12.14	31.12.13
Interest income	<b>14,208</b>	13,782	13,178	13,194	13,137
Interest expense	<b>(7,728)</b>	(7,399)	(6,449)	(6,639)	(7,351)
Net interest income	<b>6,480</b>	6,383	6,729	6,555	5,786
Credit loss (expense) / recovery	<b>(128)</b>	(37)	(117)	(78)	(50)
Net interest income after credit loss expense	<b>6,352</b>	6,346	6,612	6,477	5,736
Net fee and commission income	<b>17,214</b>	16,447	17,184	17,076	16,287
Net trading income	<b>4,974</b>	4,943	5,696	3,841	5,130
Other income	<b>939</b>	685	1,112	632	580
Total operating income	<b>29,479</b>	28,421	30,605	28,026	27,732
Total operating expenses	<b>24,481</b>	24,352	25,198	25,557	24,461
<b>Operating profit / (loss) before tax</b>	<b>4,998</b>	4,069	5,407	2,469	3,272
Tax expense / (benefit)	<b>4,077</b>	781	(908)	(1,180)	(110)
Net profit / (loss)	<b>921</b>	3,288	6,314	3,649	3,381
Net profit / (loss) attributable to preferred noteholders	<b>72</b>	78	77	142	204
Net profit / (loss) attributable to non-controlling interests	<b>4</b>	4	3	5	5
<b>Net profit / (loss) attributable to shareholders</b>	<b>845</b>	3,207	6,235	3,502	3,172
Cost / income ratio (%) <sup>1</sup>	<b>82.7</b>	85.6	82.0	90.9	88.0
<b>Rates of return (%)</b>					
Return on equity attributable to shareholders	<b>1.6</b>	5.9	11.7	7.0	6.7
Return on average equity	<b>1.6</b>	5.9	11.7	7.0	6.7
Return on average assets	<b>0.1</b>	0.3	0.6	0.3	0.3

<sup>1</sup> Calculated as operating expenses / operating income before credit loss expense.

**Cash dividends received from investments in subsidiaries and associates**

In 2017, UBS AG received cash dividends of CHF 1,261 million (2016: CHF 3,041 million; 2015: CHF 1,218 million) from its subsidiaries and associates.

## Balance sheet data

CHF million	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Assets</b>					
Total assets	<b>916,363</b>	935,353	943,256	1,062,327	1,013,355
Cash and balances with central banks	<b>87,775</b>	107,767	91,306	104,073	80,879
Due from banks	<b>13,693</b>	13,125	11,866	13,334	13,874
Cash collateral on securities borrowed	<b>12,393</b>	15,111	25,584	24,063	27,496
Reverse repurchase agreements	<b>77,240</b>	66,246	67,893	68,414	91,563
Trading portfolio assets	<b>130,807</b>	96,661	124,047	138,156	122,848
<i>of which: assets pledged as collateral that may be sold or repledged by counterparties</i>	<b>35,363</b>	30,260	51,943	56,018	42,449
Positive replacement values	<b>118,229</b>	158,411	167,435	256,978	254,084
Cash collateral receivables on derivative instruments	<b>23,434</b>	26,664	23,763	30,979	26,548
Loans	<b>321,718</b>	307,004	312,723	315,984	286,959
Financial assets designated at fair value	<b>58,556</b>	65,024	5,808	4,493	7,364
Financial assets available for sale	<b>8,665</b>	15,676	62,543	57,159	59,525
Financial assets held to maturity	<b>9,166</b>	9,289			
Other assets	<b>29,505</b>	25,412	22,249	23,069	20,228
<b>Liabilities</b>					
Due to banks	<b>7,533</b>	10,645	11,836	10,492	12,862
Cash collateral on securities lent	<b>1,789</b>	2,818	8,029	9,180	9,491
Repurchase agreements	<b>15,255</b>	6,612	9,653	11,818	13,811
Trading portfolio liabilities	<b>30,463</b>	22,825	29,137	27,958	26,609
Negative replacement values	<b>116,134</b>	153,810	162,430	254,101	248,079
Cash collateral payables on derivative instruments	<b>30,247</b>	35,472	38,282	42,372	44,507
Due to customers	<b>447,141</b>	450,199	402,522	410,979	390,825
Financial liabilities designated at fair value	<b>54,202</b>	55,017	62,995	75,297	69,901
Debt issued	<b>104,749</b>	78,998	82,359	91,207	81,586
Other liabilities	<b>54,990</b>	60,443	74,606	70,392	62,777
Equity attributable to shareholders	<b>50,718</b>	53,662	55,248	52,108	48,002

## Ratio of earnings to fixed charges

The following table sets forth UBS AG's ratio of earnings to fixed charges on an IFRS basis for the periods indicated. The ratios are calculated based on earnings from continuing operations. Ratios of earnings to fixed charges and preferred share dividends are not presented as there were no mandatory preferred share dividends in any of the periods indicated.

	For the year ended				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
	<b>1.63</b>	1.50	1.76	1.33	1.41

## C – Information on the company

### **Property, plant and equipment**

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As of 31 December 2017, UBS AG operated about 715 business and banking locations worldwide, of which approximately 45% were in Switzerland, 41% in the Americas, 7% in the rest of Europe, Middle East and Africa and 7% in Asia Pacific. Of the business and banking locations in Switzerland, 29% were

owned directly by UBS AG, with the remainder, along with most of UBS AG's offices outside Switzerland, being held under commercial leases. These premises are subject to continuous maintenance and upgrading and are considered suitable and adequate for current and anticipated operations.



## D – Information required by industry guide 3

### **Selected statistical information**

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The following tables set forth select statistical information regarding the UBS AG's banking operations extracted from the financial statements. Unless otherwise indicated, average balances for the years ended 31 December 2017, 31 December 2016 and 31 December 2015 are calculated from monthly data.

The distinction between domestic (Swiss) and foreign (non-Swiss) is generally based on the booking location. For loans, this method is not significantly different from an analysis based on the domicile of the borrower.

## Average balances and interest rates

The following table sets forth average interest-earning assets and average interest-bearing liabilities, along with the average yield, for 2017, 2016 and 2015. Refer to "Note 3 Net interest and trading income" in the "Consolidated financial statements" section of this report for more information on interest income and interest expense.

	31.12.17			31.12.16			31.12.15		
	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)
<i>CHF million, except where indicated</i>									
<b>Assets</b>									
Due from banks									
Domestic	3,541	24	0.7	3,353	20	0.6	3,525	5	0.1
Foreign	10,485	32	0.3	9,545	10	0.1	10,822	60	0.6
Cash collateral on securities borrowed and reverse repurchase agreements									
Domestic	10,136	(34)	(0.3)	10,301	(22)	(0.2)	6,415	14	0.2
Foreign	157,656	791	0.5	147,873	567	0.4	138,961	614	0.4
Trading portfolio assets <sup>1</sup>									
Domestic	3,906	138	3.5	3,867	155	4.0	5,016	159	3.2
Foreign	105,524	2,413	2.3	100,764	2,310	2.3	121,558	2,912	2.4
of which: taxable	105,524	2,413	2.3	100,764	2,310	2.3	121,558	2,912	2.4
Cash collateral receivables on derivative instruments									
Domestic	757	(3)	(0.4)	487	0	0.0	249	3	1.2
Foreign	23,805	131	0.6	25,910	116	0.4	29,469	59	0.2
Loans									
Domestic	188,284	3,270	1.7	188,290	3,492	1.9	194,032	3,646	1.9
Foreign	125,720	3,070	2.4	120,572	2,693	2.2	120,664	2,510	2.1
Financial assets designated at fair value									
Domestic	14,032	26	0.2	10,614	12	0.1	377	1	0.3
Foreign	40,393	476	1.2	41,484	309	0.7	4,689	193	4.1
Financial assets available for sale									
Domestic	1,463	9	0.6	8,876	36	0.4	20,037	63	0.3
Foreign	12,235	147	1.2	17,368	164	0.9	43,131	328	0.8
of which: taxable	12,235	147	1.2	17,368	164	0.9	43,131	328	0.8
Financial assets held to maturity									
Domestic	8,250	86	1.0	4,581	52	1.1			
Foreign	788	11	1.4	65	1	1.5			
Other interest-earning assets									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign <sup>2</sup>	12,880	674	5.2	12,134	593	4.9	12,749	526	4.1
<b>Total interest-earning assets</b>									
	719,854	11,261	1.6	706,083	10,509	1.5	711,695	11,093	1.6
Net interest income on swaps									
		1,457 <sup>3</sup>			2,214			1,630	
Interest income on off-balance sheet securities and other									
		448			423			455	
<b>Interest income and average interest-earning assets</b>									
	719,854	13,166 <sup>4</sup>	1.8	706,083	13,146 <sup>4</sup>	1.9	711,695	13,178	1.9
Non-interest-earning assets									
Positive replacement values									
	130,263			176,567			213,913		
Fixed assets									
	8,010			7,958			7,149		
Other									
	137,240			138,341			126,820		
<b>Total average assets</b>									
	995,367			1,028,949			1,059,576		

## Average balances and interest rates (continued)

	31.12.17			31.12.16			31.12.15		
	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)
<i>CHF million, except where indicated</i>									
<b>Liabilities and equity</b>									
Due to banks									
Domestic	7,686	11	0.1	9,030	18	0.2	9,571	11	0.1
Foreign	2,355	19	0.8	2,516	13	0.5	2,480	11	0.4
Cash collateral on securities lent and repurchase agreements									
Domestic	2,474	7	0.3	2,366	3	0.1	3,413	2	0.1
Foreign	88,239	348	0.4	76,845	317	0.4	71,129	442	0.6
Trading portfolio liabilities <sup>5</sup>									
Domestic	676	11	1.6	538	7	1.3	569	5	0.9
Foreign	28,017	1,482	5.3	30,041	1,608	5.4	31,426	1,665	5.3
Cash collateral payables on derivative instruments									
Domestic	812	1	0.1	968	4	0.4	993	1	0.1
Foreign	30,975	144	0.5	34,998	82	0.2	41,499	57	0.1
Due to customers									
Domestic	273,348	1,000	0.4	248,863	488	0.2	238,825	312	0.1
<i>of which: demand deposits</i>	134,393	47	0.0	130,996	(44)	0.0	126,048	(19)	0.0
<i>of which: savings deposits</i>	103,015	34	0.0	98,966	65	0.1	96,848	70	0.1
<i>of which: time deposits</i>	35,940	918	2.6	18,901	466	2.5	15,930	261	1.6
Foreign	171,948	678	0.4	179,466	676	0.4	159,027	312	0.2
Financial liabilities designated at fair value									
Domestic	2,127	13	0.6	1,632	6	0.4	2,057	6	0.3
Foreign	53,692	804	1.5	56,930	795	1.4	65,446	724	1.1
Short-term debt									
Domestic	311	(1)	(0.3)	613	1	0.2	873	4	0.5
Foreign	41,965	314	0.7	28,023	204	0.7	26,425	107	0.4
Long-term debt									
Domestic	14,889	432	2.9	15,011	448	3.0	15,182	471	3.1
Foreign	34,965	1,083	3.1	41,513	1,393	3.4	47,941	1,717	3.6
Other interest-bearing liabilities									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign <sup>6</sup>	31,177	310	1.0	38,620	113	0.3	39,968	58	0.1
<b>Total interest-bearing liabilities</b>	<b>785,655</b>	<b>6,655</b>	<b>0.8</b>	<b>767,974</b>	<b>6,176</b>	<b>0.8</b>	<b>756,824</b>	<b>5,904</b>	<b>0.8</b>
Swap interest on hedged debt instruments		(530) <sup>3</sup>							
Interest expense on off-balance sheet securities and other		561			588			546	
<b>Interest expense and average interest-bearing liabilities</b>	<b>785,655</b>	<b>6,686<sup>7</sup></b>	<b>0.9</b>	<b>767,974</b>	<b>6,763<sup>7</sup></b>	<b>0.9</b>	<b>756,824</b>	<b>6,449</b>	<b>0.9</b>
Non-interest-bearing liabilities									
Negative replacement values	127,503			172,762			210,551		
Other	28,842			32,578			37,041		
Total liabilities	942,000			973,314			1,004,416		
Total equity	53,366			55,635			55,160		
Total average liabilities and equity	995,367			1,028,949			1,059,576		
<b>Net interest income</b>		<b>6,480</b>			<b>6,383</b>			<b>6,729</b>	
<b>Net yield on interest-earning assets</b>			<b>0.9</b>			<b>0.9</b>			<b>0.9</b>

<sup>1</sup> Interest income includes dividend income from equity instruments. <sup>2</sup> Other interest-earning assets are comprised of prime brokerage receivables, which mainly include margin lending receivables. Gross receivable and payable balances within a single prime brokerage arrangement are presented as either a net receivable or a net payable on the balance sheet. <sup>3</sup> Effective 1 January 2017, the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships was refined. As a result of this presentation change, Net interest income on swaps and Swap interest on hedged debt instruments for the year ended 31 December 2017 were both lower by CHF 530 million. Prior-period information has not been restated as the effect would not have been material. Refer to "Note 1b Changes in accounting policies, comparability and other adjustments" in the "Consolidated financial statements" section of this report for more information. <sup>4</sup> For the purpose of this disclosure, negative interest income on assets is presented as a reduction to interest income, while in the consolidated income statement negative interest income on assets is presented as interest expense. Total interest income presented in the consolidated income statement was CHF 14,208 million (2016: CHF 13,782 million). <sup>5</sup> Interest expense includes expense related to dividend payment obligations. <sup>6</sup> Other interest-bearing liabilities are comprised of prime brokerage payables, which mainly include client securities financing and deposits. Gross receivable and payable balances within a single prime brokerage arrangement are presented as either a net receivable or a net payable on the balance sheet. <sup>7</sup> For the purpose of this disclosure, negative interest expense on liabilities is presented as a reduction to interest expense, while in the consolidated income statement negative interest income on liabilities is presented as interest income. Total interest expense presented in the consolidated income statement was CHF 7,728 million (2016: CHF 7,399 million).

### **Average balances and interest rates (continued)**

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The percentage of total average interest-earning assets attributable to foreign activities was 68% for 2017 (67% for 2016 and 68% for 2015). The percentage of total average interest-bearing liabilities attributable to foreign activities was 62% for 2017 (64% for 2016 and 64% for 2015). All assets and liabilities are translated into CHF at uniform month-end rates. Interest income and expense are translated at monthly average rates.

Average rates earned and paid on assets and liabilities can change from period to period based on the changes in interest rates in general, but are also affected by changes in the currency mix included in the assets and liabilities. This is especially true for foreign assets and liabilities. Tax-exempt income is not recorded on a tax-equivalent basis. For all three years presented, tax-exempt income is considered to be insignificant and the impact from such income is therefore negligible.

## Analysis of changes in interest income and expense

The following tables allocate, by categories of interest-earning assets and interest-bearing liabilities, the changes in interest income and expense due to changes in volume and interest rates for the year ended 31 December 2017 compared with the year ended 31 December 2016, and for the year ended 31 December

2016 compared with the year ended 31 December 2015. Volume and rate variances have been calculated on movements in average balances and changes in interest rates. Changes due to a combination of volume and rates have been allocated proportionally.

CHF million	2017 compared with 2016			2016 compared with 2015				
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in				
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change		
<b>Interest income from interest-earning assets</b>								
Due from banks								
Domestic	1	3	4	0	16	16		
Foreign	1	21	22	(8)	(45)	(53)		
Cash collateral on securities borrowed and reverse repurchase agreements								
Domestic	0	(12)	(12)	8	(44)	(36)		
Foreign	39	185	224	36	(83)	(47)		
Trading portfolio assets								
Domestic	2	(19)	(17)	(37)	33	(4)		
Foreign	109	(6)	103	(499)	(103)	(602)		
<i>of which: taxable</i>	<i>109</i>	<i>(6)</i>	<i>103</i>	<i>(499)</i>	<i>(103)</i>	<i>(602)</i>		
Cash collateral receivables on derivative instruments								
Domestic	0	(2)	(2)	3	(6)	(3)		
Foreign	(8)	22	14	(7)	64	57		
Loans								
Domestic	0	(222)	(222)	(109)	(46)	(155)		
Foreign	113	264	377	(2)	188	186		
Financial assets designated at fair value								
Domestic	3	11	14	31	(20)	11		
Foreign	(8)	175	167	1,509	(1,393)	116		
Financial assets available for sale								
Domestic	(30)	4	(26)	(33)	6	(27)		
Foreign	(46)	28	(18)	(206)	42	(164)		
<i>of which: taxable</i>	<i>(46)</i>	<i>28</i>	<i>(18)</i>	<i>(206)</i>	<i>42</i>	<i>(164)</i>		
Financial assets held to maturity								
Domestic	42	(8)	34	52	0	52		
Foreign	11	0	11	1	0	1		
Other interest-bearing assets								
Domestic	0	0	0	0	0	0		
Foreign	37	43	80	(25)	93	68		
Interest income								
Domestic	18	(246)	(228)	(85)	(62)	(146)		
Foreign	248	732	980	799	(1,236)	(437)		
Total interest income from interest-earning assets								
			266	486	752	714	(1,298)	(584)
Net interest income on swaps								
					(758)		584	
Interest income on off-balance sheet securities and other								
					25		(32)	
<b>Total interest income</b>								
					19		(31)	

**Analysis of changes in interest income and expense (continued)**

	2017 compared with 2016			2016 compared with 2015		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<i>CHF million</i>						
<b>Interest expense on interest-bearing liabilities</b>						
Due to banks						
Domestic	(3)	(4)	(7)	(1)	8	7
Foreign	(1)	6	5	0	2	2
Cash collateral on securities lent and repurchase agreements						
Domestic	0	3	3	(1)	3	2
Foreign	46	(15)	31	34	(160)	(126)
Trading portfolio liabilities						
Domestic	2	2	4	0	2	2
Foreign	(109)	(17)	(126)	(73)	15	(58)
Cash collateral payables on derivative instruments						
Domestic	(1)	(2)	(3)	0	4	4
Foreign	(8)	69	61	(7)	32	25
Due to customers						
Domestic	430	82	512	50	126	176
<i>of which: demand deposits</i>	0	91	91	0	(25)	(25)
<i>of which: savings deposits</i>	4	(35)	(31)	2	(7)	(5)
<i>of which: time deposits</i>	426	26	452	48	157	205
Foreign	(30)	32	2	41	324	365
Financial liabilities designated at fair value						
Domestic	2	5	7	(1)	1	0
Foreign	(45)	54	9	(94)	165	71
Short-term debt						
Domestic	(1)	0	(1)	(1)	(2)	(3)
Foreign	98	12	110	6	92	98
Long-term debt						
Domestic	(4)	(12)	(16)	(5)	(18)	(23)
Foreign	(223)	(87)	(310)	(231)	(93)	(324)
Other interest-bearing liabilities						
Domestic	0	0	0	0	0	0
Foreign	(22)	220	198	(1)	56	55
Interest expense						
Domestic	425	74	499	41	123	164
Foreign	(294)	274	(20)	(325)	433	108
Total interest expense on interest-bearing liabilities	131	348	479	(284)	556	272
Swap interest on hedged debt instruments			(530)			
Interest expense on off-balance sheet securities and other			(26)			42
<b>Total interest expense</b>			<b>(77)</b>			<b>314</b>

## Deposits

The following table analyzes average deposits and average rates on each deposit category listed below for the years ended 31 December 2017, 2016 and 2015. The geographic allocation is based on the location of the office or branch where the deposit

is made. Deposits by foreign depositors in domestic offices were CHF 65,938 million, CHF 76,759 million and CHF 72,544 million at 31 December 2017, 31 December 2016 and 31 December 2015, respectively.

	31.12.17		31.12.16		31.12.15	
	Average deposits	Average rate (%)	Average deposits	Average rate (%)	Average deposits	Average rate (%)
<i>CHF million, except where indicated</i>						
<b>Banks</b>						
<b>Domestic offices</b>						
Demand deposits	3,951	(0.5)	5,046	(0.3)	5,261	(0.2)
Time deposits	3,735	0.8	3,984	0.8	4,310	0.5
Total domestic offices	7,686	0.2	9,030	0.2	9,571	0.1
<b>Foreign offices</b>						
Interest-bearing deposits	2,355	0.8	2,516	0.5	2,437	0.4
<b>Total due to banks<sup>1</sup></b>	<b>10,041</b>	<b>(0.9)</b>	<b>11,546</b>	<b>0.3</b>	<b>12,007</b>	<b>0.2</b>
<b>Customer accounts</b>						
<b>Domestic offices</b>						
Demand deposits	134,393	0.0	130,996	0.0	126,048	0.0
Savings deposits	103,015	0.0	98,966	0.1	96,848	0.1
Time deposits	35,940	2.6	18,901	2.5	15,930	0.1
Total domestic offices	273,348	0.4	248,863	0.2	238,825	0.1
<b>Foreign offices</b>						
Demand deposits	58,985	0.1	55,617	0.0	52,406	0.0
Time and savings deposits	112,963	0.7	123,850	0.5	106,622	0.2
Total foreign offices	171,948	0.4	179,466	0.4	159,027	0.2
<b>Total due to customers</b>	<b>445,296</b>	<b>0.4</b>	<b>428,329</b>	<b>0.3</b>	<b>397,853</b>	<b>0.2</b>

<sup>1</sup> Due to banks is considered to represent short-term borrowings to the extent that the total Due to banks exceeds total Due from banks, without differentiating between domestic and foreign offices. The remainder of total Due to banks is considered to represent deposits for the purpose of this disclosure.

As of 31 December 2017, the maturity of time deposits was as follows:

<i>CHF million</i>	Domestic	Foreign
Within 3 months	9,906	45,751
3 to 6 months	666	1,591
6 to 12 months	529	2,253
1 to 5 years	17,519	576
Over 5 years	18,144	22
<b>Total time deposits</b>	<b>46,764</b>	<b>50,194</b>

## Short-term borrowings

The table below presents the period-end, average and maximum month-end outstanding amounts for short-term borrowings, along with average and period-end interest rates.

CHF million, except where indicated	Short-term debt <sup>1</sup>			Due to banks <sup>2</sup>			Repurchase agreements <sup>3</sup>		
	31.12.17	31.12.16	31.12.15	31.12.17	31.12.16	31.12.15	31.12.17	31.12.16	31.12.15
Period-end balance	50,953	26,178	21,215	0	0	0	92,057	78,083	71,775
Average balance	42,276	28,636	27,298	0	184	44	87,532	73,876	65,118
Maximum month-end balance	55,720	32,040	31,911	0	2,386	570	106,601	82,858	80,372
Average interest rate during the period (%)	0.7	0.7	0.4	0.0	0.3	0.2	0.2	0.0	0.3
Average interest rate at period end (%)	0.7	0.9	0.5	0.0	0.0	0.0	0.2	(0.1)	0.2

<sup>1</sup> Short-term debt is comprised of certificates of deposit, commercial paper, acceptances and promissory notes, and other money market paper reported within Debt issued (held at amortized cost). <sup>2</sup> Amounts due to banks are presented net of amounts due from banks in order to reflect short-term borrowings. The difference between the gross Due to banks amount and the amount disclosed here is presented as deposits from banks on the preceding page. <sup>3</sup> Repurchase agreements are presented on a gross basis and therefore, for the purpose of this disclosure, do not reflect the effect of netting permitted under IFRS.

## Debt instruments designated at fair value, available for sale and held to maturity

The table below presents the carrying value and yield of debt instruments designated at fair value, available for sale and held to maturity by contractual maturity bucket. The maturity information presented does not consider any early redemption features and debt instruments without fixed maturities are not included.

CHF million, except percentages	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
<b>Financial assets designated at fair value</b>									
Swiss national government and agencies	901	(0.25)							901
US Treasury and agencies	8,494	1.20	3,261	1.64	2	1.51			11,757
Foreign governments and official institutions	17,759	0.27	7,420	1.04	320	0.12			25,499
Corporate debt securities	2,513	0.12	6,216	1.03	542	0.16			9,272
Mortgage-backed securities							84	1.62	84
<b>Subtotal as of 31 December 2017</b>	<b>29,667</b>		<b>16,898</b>		<b>864</b>		<b>84</b>		<b>47,512</b>
<b>Financial assets available for sale</b>									
Swiss national government and agencies					1	4.00			1
US Treasury and agencies	848	0.57	1,697	1.24	143	0.70			2,689
Foreign governments and official institutions	354	3.86	76	2.43					430
Corporate debt securities	382	1.06	497	0.97	51	0.18			929
Mortgage-backed securities			0	1.42	602	1.35	3,278	1.53	3,880
<b>Subtotal as of 31 December 2017</b>	<b>1,584</b>		<b>2,269</b>		<b>797</b>		<b>3,278</b>		<b>7,928</b>
<b>Financial assets held to maturity</b>									
US Treasury and agencies			1,782	1.32	3,051	1.71			4,833
Foreign governments and official institutions	1,870	(0.08)	773	1.35					2,643
Corporate debt securities	729	0.95	960	1.41					1,689
<b>Subtotal as of 31 December 2017</b>	<b>2,600</b>		<b>3,515</b>		<b>3,051</b>		<b>0</b>		<b>9,166</b>
<b>Total as of 31 December 2017<sup>1</sup></b>	<b>33,851</b>		<b>22,682</b>		<b>4,712</b>		<b>3,362</b>		<b>64,606</b>



## Debt instruments designated at fair value, available for sale and held to maturity (continued)

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
<i>CHF million, except percentages</i>									
<b>Financial assets designated at fair value</b>									
Swiss national government and agencies	1,761	(0.23)							1,761
US Treasury and agencies	14,719	0.49	6,686	0.82	2	1.38			21,406
Foreign governments and official institutions	15,590	0.06	12,803	0.24	270	0.58			28,664
Corporate debt securities	2,287	0.56	6,213	0.82	320	0.29			8,820
Mortgage-backed securities							103	1.65	103
<b>Subtotal as of 31 December 2016</b>	<b>34,356</b>		<b>25,702</b>		<b>592</b>		<b>103</b>		<b>60,754</b>
<b>Financial assets available for sale</b>									
Swiss national government and agencies					1	4.00			1
US Treasury and agencies	1,616	0.31	2,782	0.94					4,398
Foreign governments and official institutions	2,230	1.21	1,624	0.66	15	0.32			3,869
Corporate debt securities	1,239	0.50	1,920	0.56	50	0.18	5	0.00	3,215
Mortgage-backed securities			0	5.52	0	1.96	3,380	1.65	3,381
<b>Subtotal as of 31 December 2016</b>	<b>5,085</b>		<b>6,326</b>		<b>68</b>		<b>3,385</b>		<b>14,864</b>
<b>Financial assets held to maturity</b>									
US Treasury and agencies	406	0.59	1,137	1.04	3,145	1.59			4,688
Foreign governments and official institutions	975	(0.54)	1,753	0.85					2,728
Corporate debt securities	245	0.89	1,629	1.15					1,873
<b>Subtotal as of 31 December 2016</b>	<b>1,626</b>		<b>4,519</b>		<b>3,145</b>		<b>0</b>		<b>9,289</b>
<b>Total as of 31 December 2016<sup>1</sup></b>	<b>41,067</b>		<b>36,547</b>		<b>3,805</b>		<b>3,488</b>		<b>84,908</b>
<b>Financial assets available for sale</b>									
Swiss national government and agencies	701	(0.83)			1	4.00			702
US Treasury and agencies	11,171	0.39	6,856	1.29					18,027
Foreign governments and official institutions	13,966	0.21	11,049	0.64	104	1.33			25,119
Corporate debt securities	6,062	0.42	8,118	0.87	264	1.27			14,443
Mortgage-backed securities			0	5.20			3,396	1.74	3,396
<b>Total as of 31 December 2015<sup>1</sup></b>	<b>31,900</b>		<b>26,023</b>		<b>369</b>		<b>3,396</b>		<b>61,688</b>

<sup>1</sup> Includes investments in debt instruments as of 31 December 2017 issued by US government and government agencies of CHF 23,159 million (31 December 2016: CHF 33,873 million, 31 December 2015: CHF 21,424 million), the German government of CHF 6,865 million (31 December 2016: CHF 11,961 million, 31 December 2015: CHF 8,583 million) and the French government of CHF 5,944 million (31 December 2016: CHF 4,019 million, 31 December 2015: CHF 3,566 million).

**Due from banks and loans by industry (gross)**

UBS AG's lending portfolio is widely diversified across industry sectors. CHF 192 billion (57% of the total) consists of loans to thousands of private households, predominantly in Switzerland, and mostly secured by mortgages, financial collateral or other assets. Exposure to banks and financial institutions amounted to CHF 80 billion (24% of the total). Exposure to banks includes money market deposits with highly rated institutions. Excluding banks and financial institutions, the largest industry sector exposure as of 31 December 2017 was CHF 22 billion (6% of the total) to Services. For further discussion of the loan portfolio,

refer to the "Risk management and control" section of this report.

The table below illustrates the diversification of the loan portfolio among industry sectors. The industry categories presented are consistent with the classification of loans for reporting to the Swiss Financial Market Supervisory Authority (FINMA) and the Swiss National Bank. Loans designated at fair value and loans held in the trading portfolio are excluded from the tables below.

<i>CHF million</i>	<b>31.12.17</b>	31.12.16	31.12.15	31.12.14	31.12.13
<b>Domestic</b>					
Banks	705	778	772	1,157	736
Chemicals	426	262	308	392	382
Construction	1,430	1,479	1,520	1,418	1,429
Electricity, gas and water supply	207	201	234	260	255
Financial services	7,158	5,719	6,061	6,693	4,643
Food and beverages	435	220	208	206	241
Hotels and restaurants	1,498	1,555	1,647	1,696	1,817
Manufacturing	2,272	2,000	2,012	2,319	2,512
Mining	14	19	23	34	36
Private households	124,368	123,745	123,967	125,461	124,569
Public authorities	1,026	1,364	1,609	2,098	2,415
Real estate and rentals	12,415	12,805	13,707	14,549	14,511
Retail and wholesale	4,018	4,008	3,687	4,169	3,784
Services	4,924	5,402	5,250	4,794	5,330
Transport, storage and communication	1,824	1,919	1,876	1,964	2,013
Other	731	708	697	732	752
<b>Total domestic</b>	<b>163,452</b>	162,181	163,578	167,940	165,426
<b>Foreign</b>					
Banks	12,991	12,350	11,097	12,190	13,201
Chemicals	60	141	113	75	178
Construction	817	550	635	645	1,132
Electricity, gas and water supply	674	587	706	1,100	1,337
Financial services	58,855	50,366	56,414	57,645	43,125
Food and beverages	58	69	65	56	63
Hotels and restaurants	1,456	171	148	120	181
Manufacturing	1,820	1,714	1,958	1,961	1,850
Mining	1,011	1,007	1,466	1,345	1,175
Private households	67,501	62,598	62,695	60,466	49,920
Public authorities	2,207	2,551	1,272	1,413	1,322
Real estate and rentals	3,132	2,066	2,213	2,517	2,995
Retail and wholesale	2,590	2,223	1,975	1,924	1,791
Services	16,738	19,498	17,924	17,470	14,733
Transport, storage and communication	2,159	2,440	2,858	3,017	2,809
Other	552	217	163	142	361
<b>Total foreign</b>	<b>172,619</b>	158,547	161,703	162,086	136,174
<b>Total gross</b>	<b>336,071</b>	320,728	325,281	330,027	301,601

## Due from banks and loans – mortgages (gross)

The table below provides more information on UBS AG's mortgage portfolio by client domicile and type of mortgage. Mortgages are included in the industry categories in the table on the previous page.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Mortgages</b>					
Domestic	141,613	142,040	144,230	146,637	144,852
Foreign	21,535	19,921	18,887	18,112	15,235
<b>Total gross mortgages</b>	<b>163,148</b>	161,961	163,117	164,748	160,086
<b>Mortgages</b>					
Residential	144,431	142,197	141,608	142,380	137,370
Commercial	18,717	19,765	21,509	22,368	22,716
<b>Total gross mortgages</b>	<b>163,148</b>	161,961	163,117	164,748	160,086

## Due from banks and loans – maturity profile (gross)

The table below provides the maturity profile of loans and amounts due from banks. The maturity information presented does not consider any early redemption features.

<i>CHF million</i>	Within 1 year	1 to 5 years	Over 5 years	Total
<b>Domestic</b>				
Banks	705	0	0	705
Mortgages	53,422	57,149	31,042	141,613
Other loans	14,276	5,409	1,449	21,135
<b>Total domestic</b>	68,403	62,558	32,492	163,452
<b>Foreign</b>				
Banks	12,878	91	23	12,991
Mortgages	4,128	5,414	11,993	21,535
Other loans	116,266	19,012	2,815	138,093
<b>Total foreign</b>	133,272	24,516	14,830	172,619
<b>Total gross</b>	201,674	87,075	47,322	336,071

As of 31 December 2017, total loans and amounts due from banks granted at fixed and floating interest rates were as follows:

<i>CHF million</i>	Within 1 year	1 to 5 years	Over 5 years	Total
Fixed-rate loans	139,690	67,214	35,293	242,197
Adjustable or floating-rate loans	61,984	19,861	12,029	93,874
<b>Total</b>	201,674	87,075	47,322	336,071

## Impaired and non-performing loans

A loan (included in Due from banks or Loans) is classified as non-performing: (i) when the payment of interest, principal or fees is overdue by more than 90 days, or more than 180 days for certain specified retail portfolios, (ii) when bankruptcy or insolvency proceedings have commenced or (iii) when obligations have been restructured on preferential terms. For IFRS reporting purposes, the definition of impaired loans is more comprehensive, covering both non-performing loans and other situations where objective evidence indicates that UBS AG may

be unable to collect all amounts due. Refer to "Impaired loans" in the "Risk management and control" section of this report for comprehensive information on UBS AG's impaired loans, of which non-performing loans are a component. Also, refer to Note 1 to the consolidated financial statements for more information on the various risk factors that are considered to be indicative of impairment.

The table below provides an analysis of UBS AG's non-performing loans.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Non-performing loans:</b>					
Domestic	1,339	1,524	1,174	1,293	1,113
Foreign	756	875	455	309	469
<b>Total non-performing loans</b>	<b>2,095</b>	2,399	1,630	1,602	1,582

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Gross interest income not collected on non-performing loans:<sup>1</sup></b>					
Domestic	8	5	6	9	6
Foreign	26	22	7	6	4
<b>Interest income included in Net profit for non-performing loans:</b>					
Domestic	33	36	26	22	23
Foreign	6	10	5	7	7

<sup>1</sup> Based on application of effective interest rate method to loan balances net of credit losses under IAS 39.

Under imminent payment default or where default has already occurred, we sometimes restructure claims by providing concessions that we would otherwise not consider and that are outside of our normal risk appetite, such as preferential interest rates, extension of maturity, modifying the schedule of repayments, debt/equity swap and subordination. When a credit restructuring takes place, each case is considered individually and the exposure is classified as defaulted and assessed for impairment. It will remain so, until the loan is collected or written-off, non-preferential conditions are granted that

supersede the preferential conditions, or until the counterparty has recovered and the preferential conditions no longer exceed our risk appetite. Contractual adjustments when there is no evidence of imminent payment default, or where changes to terms and conditions are within our usual risk appetite, are not considered to be a credit restructuring.

Gross interest income not collected that relates to restructured non-performing loans was not material to the results of operations in 2017, 2016, 2015, 2014 or 2013.

## Cross-border outstandings

Cross-border outstandings consist of balances with central banks and other financial institutions, loans, reverse repurchase agreements and cash collateral on securities borrowed with counterparties domiciled outside Switzerland. Guarantees and commitments are provided separately in the table below.

The following tables list those countries for which cross-border outstandings exceeded 0.75% of total IFRS assets at 31 December 2017, 2016 and 2015. As of 31 December 2017, there were no outstandings that exceeded 0.75% of total IFRS assets in any country currently facing debt restructuring or

liquidity problems that UBS AG expects would materially impact the country's ability to service its obligations. Aggregate country risk exposures are monitored and reported on an ongoing basis. The internal risk view is not directly comparable to the cross-border outstandings in the table below due to different approaches to netting, differing trade populations and differing approach to allocation of exposures to countries. For more information on the country framework within risk control, refer to the "Risk management and control" section of this report.

31.12.17

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and commitments <sup>1</sup>
USA	21,278	87,401	15,930	124,610	13.6	23,218
UK	2,283	53,174	6,397	61,855	6.8	12,143
Japan	1,682	8,144	8,918	18,743	2.0	80
Germany	1,477	8,274	9,109	18,860	2.1	1,340
France	2,453	5,694	5,013	13,160	1.4	5,851
Hong Kong	594	16,421	328	17,343	1.9	431
Singapore	165	4,405	2,960	7,529	0.8	509

31.12.16

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and commitments <sup>1</sup>
USA	19,652	78,947	22,859	121,458	13.0	36,017
UK	2,595	48,246	9,767	60,608	6.5	10,356
Japan	5,197	5,671	9,165	20,033	2.1	237
Germany	699	4,973	13,063	18,735	2.0	1,513
France	2,385	5,641	2,871	10,897	1.2	4,265
Hong Kong	410	8,171	349	8,930	1.0	154

31.12.15

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and commitments <sup>1</sup>
USA	8,633	90,201	27,807	126,641	13.4	42,286
UK	4,498	56,282	9,560	70,340	7.5	6,448
Japan	3,466	11,275	5,054	19,794	2.1	136
France	4,043	3,758	681	8,482	0.9	5,029
Hong Kong	344	7,692	121	8,157	0.9	79

<sup>1</sup> Includes forward starting transactions (reverse repurchase agreements and securities borrowing agreements).

## Summary of movements in allowances and provisions for credit losses

The following table provides more information on the movements in allowances and provisions for credit losses. Refer to "Credit risk" in the "Risk management and control" section of this report for more information.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Balance at beginning of year</b>	<b>653</b>	<b>727</b>	<b>735</b>	<b>750</b>	<b>794</b>
<b>Domestic</b>					
<b>Write-offs</b>					
Construction	(5)	(1)	(2)	(1)	(2)
Electricity, gas and water supply	0	0	(1)	0	0
Financial services	(3)	(3)	(3)	0	(6)
Manufacturing	(2)	(7)	(9)	(3)	(4)
Private households	(17)	(20)	(35)	(39)	(38)
Real estate and rentals	0	0	0	(1)	0
Retail and wholesale	(10)	(10)	(47)	(28)	(11)
Services	(10)	(3)	(3)	(15)	(4)
Transport, storage and communications	(3)	(4)	(9)	(3)	(1)
<b>Total gross domestic write-offs</b>	<b>(51)</b>	<b>(49)</b>	<b>(110)</b>	<b>(90)</b>	<b>(67)</b>
<b>Foreign</b>					
<b>Write-offs</b>					
Banks	0	0	(9)	(15)	(1)
Construction	(1)	0	0	(1)	(6)
Electricity, gas and water supply	0	0	0	(1)	0
Financial services	(24)	(5)	(3)	(12)	(44)
Manufacturing	0	(21)	0	(7)	0
Mining	(16)	(25)	(1)	0	0
Private households	(21)	(8)	(12)	(6)	(6)
Public authorities	0	0	0	0	(1)
Real estate and rentals	0	0	0	(2)	(1)
Retail and wholesale	0	0	(19)	(2)	(1)
Services	(4)	(16)	(10)	(14)	0
Transport, storage and communications	0	(21)	0	(1)	0
<b>Total gross foreign write-offs</b>	<b>(66)</b>	<b>(96)</b>	<b>(54)</b>	<b>(63)</b>	<b>(61)</b>
<b>Total usage of provisions</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1)</b>	<b>0</b>
<b>Total write-offs / usage of provisions</b>	<b>(117)</b>	<b>(145)</b>	<b>(164)</b>	<b>(154)</b>	<b>(128)</b>
<b>Recoveries</b>					
Domestic	19	11	41	29	35
Foreign	1	11	7	0	10
<b>Total recoveries</b>	<b>20</b>	<b>22</b>	<b>48</b>	<b>29</b>	<b>45</b>
<b>Total net write-offs / usage of provisions</b>	<b>(98)</b>	<b>(123)</b>	<b>(116)</b>	<b>(124)</b>	<b>(83)</b>
Increase / (decrease) in specific allowances and provisions recognized in the income statement	124	31	117	89	144
Increase / (decrease) in collective loan loss allowances recognized in the income statement	3	6	0	(11)	(93)
Foreign currency translation	(7)	0	(11)	21	(9)
Other	37	12	2	11	(3)
<b>Balance at end of year<sup>1</sup></b>	<b>713</b>	<b>653</b>	<b>727</b>	<b>735</b>	<b>750</b>

<sup>1</sup> Includes allowances for cash collateral on securities borrowed.

## Allocation of the allowances and provisions for credit losses

The following table provides a breakdown of allowances and provisions for credit loss by industry sector and geographic location.

<i>CHF million</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Domestic</b>					
Banks	3	3	3	2	3
Chemicals	0	0	0	0	1
Construction	16	17	13	14	16
Electricity, gas and water supply	3	1	2	1	1
Financial services	23	13	17	18	16
Food and beverages	0	0	3	4	2
Hotels and restaurants	9	10	13	16	12
Manufacturing	56	60	77	72	57
Private households	45	46	47	52	54
Real estate and rentals	11	11	13	18	9
Retail and wholesale	74	67	78	123	152
Services	24	28	23	25	23
Transport, storage and communication	13	15	32	29	19
<b>Total domestic specific allowances</b>	<b>278</b>	273	321	374	365
<b>Foreign</b>					
Banks	0	0	0	10	13
Construction	0	1	1	1	17
Electricity, gas and water supply	0	0	0	0	1
Financial services	41	65	90	35	37
Manufacturing	83	7	13	9	18
Mining	50	30	46	11	2
Private households	38	59	61	65	66
Public authorities	10	11	14	14	16
Real estate and rentals	23	2	1	1	2
Retail and wholesale	83	80	80	112	77
Services	23	17	19	29	35
Transport, storage and communication	38	41	40	43	19
<b>Total foreign specific allowances</b>	<b>389</b>	314	365	330	303
Collective loan loss allowances	13	12	6	8	20
Provisions for loan commitments and guarantees	33	54	35	23	61
<b>Total allowances and provisions for credit losses</b>	<b>713</b>	653	727	735	750

**Due from banks and loans by industry sector (gross)**

The table below presents the percentage of loans in each industry sector and geographic location in relation to total loans.

<i>In %</i>	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
<b>Domestic</b>					
Banks	0.2	0.2	0.2	0.4	0.2
Chemicals	0.1	0.1	0.1	0.1	0.1
Construction	0.4	0.5	0.5	0.4	0.5
Electricity, gas and water supply	0.1	0.1	0.1	0.1	0.1
Financial services	2.1	1.8	1.9	2.0	1.5
Food and beverages	0.1	0.1	0.1	0.1	0.1
Hotels and restaurants	0.4	0.5	0.5	0.5	0.6
Manufacturing	0.7	0.6	0.6	0.7	0.8
Private households	37.0	38.6	38.1	38.0	41.3
Public authorities	0.3	0.4	0.5	0.6	0.8
Real estate and rentals	3.7	4.0	4.2	4.4	4.8
Retail and wholesale	1.2	1.2	1.1	1.3	1.3
Services	1.5	1.7	1.6	1.5	1.8
Transport, storage and communication	0.5	0.6	0.6	0.6	0.7
Other <sup>1</sup>	0.2	0.2	0.2	0.2	0.1
<b>Total domestic</b>	<b>48.6</b>	50.6	50.3	50.9	54.8
<b>Foreign</b>					
Banks	3.9	3.9	3.4	3.7	4.4
Chemicals	0.0	0.0	0.0	0.0	0.1
Construction	0.2	0.2	0.2	0.2	0.4
Electricity, gas and water supply	0.2	0.2	0.2	0.3	0.4
Financial services	17.5	15.7	17.3	17.5	14.3
Hotels and restaurants	0.4	0.1	0.0	0.0	0.1
Manufacturing	0.5	0.5	0.6	0.6	0.6
Mining	0.3	0.3	0.5	0.4	0.4
Private households	20.1	19.5	19.3	18.3	16.6
Public authorities	0.7	0.8	0.4	0.4	0.4
Real estate and rentals	0.9	0.6	0.7	0.8	1.0
Retail and wholesale	0.8	0.7	0.6	0.6	0.6
Services	5.0	6.1	5.5	5.3	4.9
Transport, storage and communication	0.6	0.8	0.9	0.9	0.9
Other <sup>2</sup>	0.2	0.1	0.1	0.0	0.2
<b>Total foreign</b>	<b>51.4</b>	49.4	49.7	49.1	45.2
<b>Total gross</b>	<b>100.0</b>	100.0	100.0	100.0	100.0

<sup>1</sup> Includes mining. <sup>2</sup> Includes food and beverages.



## Abbreviations frequently used in our financial reports

<b>A</b>		CMBS	commercial mortgage-backed security	<b>F</b>	
ABS	asset-backed security	CRD IV	EU Capital Requirements Directive of 2013	FCA	UK Financial Conduct Authority
AGM	annual general meeting of shareholders	CRM	credit risk mitigation (credit risk) or comprehensive risk measure (market risk)	FCT	foreign currency translation
A-IRB	advanced internal ratings-based	CST	combined stress test	FDIC	Federal Deposit Insurance Corporation
AIV	alternative investment vehicle	CVA	credit valuation adjustment	FINMA	Swiss Financial Market Supervisory Authority
ALCO	Asset and Liability Management Committee	<b>D</b>		FMIA	Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading
AMA	advanced measurement approach	DBO	defined benefit obligation	FMIO	FINMA Ordinance on Financial Market Infrastructure
AoA	Articles of Association of UBS Group AG	DCCP	Deferred Contingent Capital Plan	FRA	forward rate agreement
AT1	additional tier 1	DOJ	Department of Justice	FSA	UK Financial Services Authority
<b>B</b>		DTA	deferred tax asset	FSB	Financial Stability Board
BEAT	base erosion and anti-abuse tax	DVA	debit valuation adjustment	FTD	first to default
BCBS	Basel Committee on Banking Supervision	<b>E</b>		FVA	funding valuation adjustment
BIS	Bank for International Settlements	EAD	exposure at default	FX	foreign exchange
BoD	Board of Directors	EBA	European Banking Authority	<b>G</b>	
<b>C</b>		EC	European Commission	GAAP	generally accepted accounting principles
CC	Corporate Center	ECB	European Central Bank	GBP	British pound
CCAR	Comprehensive Capital Analysis and Review	ECL	expected credit loss	GEB	Group Executive Board
CCF	credit conversion factor	EIR	effective interest rate	GHG	greenhouse gas
CCP	central counterparty	EMEA	Europe, Middle East and Africa	GIA	Group Internal Audit
CCR	counterparty credit risk	EOP	Equity Ownership Plan	GIIPS	Greece, Italy, Ireland, Portugal and Spain
CCRC	Corporate Culture and Responsibility Committee	EPS	earnings per share	GMD	Group Managing Director
CDO	collateralized debt obligation	ERISA	Employee Retirement Income Security Act of 1974	GRI	Global Reporting Initiative
CDR	constant default rate	ETD	exchange-traded derivative	Group ALM	Group Asset and Liability Management
CDS	credit default swap	ETF	exchange-traded fund	G-SIB	global systemically important bank
CEA	Commodity Exchange Act	EU	European Union	<b>H</b>	
CEO	Chief Executive Officer	EUR	euro	HQLA	high-quality liquid assets
CET1	common equity tier 1	EURIBOR	Euro Interbank Offered Rate		
CFO	Chief Financial Officer				
CFTC	Commodity Futures Trading Commission				
CHF	Swiss franc				
CLN	credit-linked note				
CLO	collateralized loan obligation				

## Abbreviations frequently used in our financial reports (continued)

<b>I</b>		<b>O</b>		<b>S</b>	
IAS	International Accounting Standards	OCI	other comprehensive income	SA	standardized approach
IASB	International Accounting Standards Board	OTC	over-the-counter	SA-CCR	standardized approach for counterparty credit risk
IFRS	International Financial Reporting Standards	<b>P</b>		SAR	stock appreciation right
IMM	internal model method	PD	probability of default	SE	structured entity
IRB	internal ratings-based	PFE	potential future exposure	SEC	US Securities and Exchange Commission
IRC	incremental risk charge	PRA	UK Prudential Regulation Authority	SEEOP	Senior Executive Equity Ownership Plan
ISDA	International Swaps and Derivatives Association	PRV	positive replacement value	SFA	supervisory formula approach
<b>K</b>		<b>Q</b>		SESTA	Swiss Federal Act on Stock Exchanges and Securities Trading
KPI	key performance indicator	QRRE	qualifying revolving retail exposures	SESTO	FINMA Ordinance on Stock Exchanges and Securities Trading
KRT	Key Risk Taker	<b>R</b>		SFT	securities financing transaction
<b>L</b>		RBA	ratings-based approach	SI	sustainable investing
LAS	liquidity-adjusted stress	RBC	risk-based capital	SICR	significant increase in credit risk
LCR	liquidity coverage ratio	RLN	reference-linked note	SME	small and medium-sized enterprises
LGD	loss given default	RMBS	residential mortgage-backed security	SMF	Senior Management Function
LIBOR	London Interbank Offered Rate	RniV	risks-not-in-VaR	SNB	Swiss National Bank
LRD	leverage ratio denominator	RoAE	return on attributed equity	SRB	systemically relevant bank
LTV	loan-to-value	RoE	return on equity	SRM	specific risk measure
<b>M</b>		RoTE	return on tangible equity	SVaR	stressed value-at-risk
MiFID II	Markets in Financial Instruments Directive II	RV	replacement value	<b>T</b>	
MiFIR	Markets in Financial Instruments associated Regulation	RW	risk weight	TBTF	too big to fail
MRT	Material Risk Taker	RWA	risk-weighted assets	TCJA	Tax Cuts and Jobs Act
MTN	medium-term note			TLAC	total loss-absorbing capacity
<b>N</b>				TRS	total return swap
NAV	net asset value			<b>U</b>	
NII	net interest income			USD	US dollar
NPA	non-prosecution agreement			<b>V</b>	
NRV	negative replacement value			VaR	value-at-risk
NSFR	net stable funding ratio				

# Information sources

## Reporting publications

**Annual publications:** *Annual Report (SAP no. 80531)*: Published in English, this single-volume report provides a description of our Group strategy and performance; the strategy and performance of the business divisions and Corporate Center; a description of risk, treasury, capital management, corporate governance, corporate responsibility and our compensation framework, including information on compensation for the Board of Directors and the Group Executive Board members; and financial information, including the financial statements. *Auszug aus dem Geschäftsbericht (SAP no. 80531)*: This publication provides the translation into German of selected sections of the Annual Report. *Annual Review (SAP no. 80530)*: The booklet contains key information on our strategy and performance, with a focus on corporate responsibility at UBS. It is published in English, German, French and Italian. *Compensation Report (SAP no. 82307)*: The report discusses our compensation framework and provides information on compensation for the Board of Directors and the Group Executive Board members. It is available in English and German.

**Quarterly publications:** The quarterly financial report provides an update on our strategy and performance for the respective quarter. It is available in English.

**How to order publications:** The annual and quarterly publications are available in PDF at [www.ubs.com/investors](http://www.ubs.com/investors) in the "UBS Group AG and UBS AG consolidated financial information" section, and printed copies can be requested from UBS free of charge. For annual publications refer to [www.ubs.com/investors](http://www.ubs.com/investors) in the "Investor services" section, which can be accessed via the link on the left-hand side of the screen. Alternatively, they can be ordered by quoting the SAP number and the language preference, where applicable, from UBS AG, F4UK-AUL, P.O. Box, CH-8098 Zurich, Switzerland.

## Other information

**Website:** The "Investor Relations" website at [www.ubs.com/investors](http://www.ubs.com/investors) provides the following information on UBS: news releases, financial information, including results-related filings with the US Securities and Exchange Commission, information for shareholders, including UBS share price charts as well as data and dividend information, and for bondholders, the UBS corporate calendar and presentations by management for investors and financial analysts. Information on the internet is available in English, with some information also available in German.

**Results presentations:** Our quarterly results presentations are webcast live. A playback of most presentations is downloadable at [www.ubs.com/presentations](http://www.ubs.com/presentations).

**Messaging service:** Email alerts to news about UBS can be subscribed to under "UBS News Alert" at [www.ubs.com/investors](http://www.ubs.com/investors). Messages are sent in English, German, French or Italian, with an option to select theme preferences for such alerts.

**Form 20-F and other submissions to the US Securities and Exchange Commission:** We file periodic reports and submit other information about UBS to the US Securities and Exchange Commission (SEC). Principal among these filings is the annual report on Form 20-F, filed pursuant to the US Securities Exchange Act of 1934. The filing of Form 20-F is structured as a "wrap-around" document. Most sections of the filing can be satisfied by referring to parts of the annual report. However, there is a small amount of additional information in Form 20-F that is not presented elsewhere and is particularly targeted at readers in the US. Readers are encouraged to refer to this additional disclosure. Any document that we file with the SEC is available on the SEC's website [www.sec.gov](http://www.sec.gov), or at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, DC, 20549. Call the SEC on +1-800-SEC-0330 for more information on the operation of its public reference room. Refer to [www.ubs.com/investors](http://www.ubs.com/investors) for more information.

**Cautionary Statement Regarding Forward-Looking Statements** | This report contains statements that constitute “forward-looking statements,” including but not limited to management’s outlook for UBS’s financial performance and statements relating to the anticipated effect of transactions and strategic initiatives on UBS’s business and future development. While these forward-looking statements represent UBS’s judgments and expectations concerning the matters described, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from UBS’s expectations. These factors include, but are not limited to: (i) the degree to which UBS is successful in the ongoing execution of its strategic plans, including its cost reduction and efficiency initiatives and its ability to manage its levels of risk-weighted assets (RWA), including to counteract regulatory-driven increases, leverage ratio denominator, liquidity coverage ratio and other financial resources, and the degree to which UBS is successful in implementing changes to its businesses to meet changing market, regulatory and other conditions; (ii) continuing low or negative interest rate environment, developments in the macroeconomic climate and in the markets in which UBS operates or to which it is exposed, including movements in securities prices or liquidity, credit spreads, and currency exchange rates, and the effects of economic conditions, market developments, and geopolitical tensions on the financial position or creditworthiness of UBS’s clients and counterparties as well as on client sentiment and levels of activity; (iii) changes in the availability of capital and funding, including any changes in UBS’s credit spreads and ratings, as well as availability and cost of funding to meet requirements for debt eligible for total loss-absorbing capacity (TLAC); (iv) changes in or the implementation of financial legislation and regulation in Switzerland, the US, the UK and other financial centers that have imposed, or resulted in, or may do so in the future, more stringent or entity-specific capital, TLAC, leverage ratio, liquidity and funding requirements, incremental tax requirements, additional levies, limitations on permitted activities, constraints on remuneration, constraints on transfers of capital and liquidity and sharing of operational costs across the Group or other measures, and the effect these will or would have on UBS’s business activities; (v) the degree to which UBS is successful in implementing further changes to its legal structure to improve its resolvability and meet related regulatory requirements, including changes in legal structure and reporting required to implement US enhanced prudential standards, and the potential need to make further changes to the legal structure or booking model of UBS Group in response to legal and regulatory requirements, to proposals in Switzerland and other jurisdictions for mandatory structural reform of banks or systemically important institutions or to other external developments, and the extent to which such changes will have the intended effects; (vi) uncertainty as to the extent to which the Swiss Financial Market Supervisory Authority (FINMA) will confirm limited reductions of gone concern requirements due to measures to reduce resolvability risk; (vii) the uncertainty arising from the timing and nature of the UK exit from the EU and the potential need to make changes in UBS’s legal structure and operations as a result of it; (viii) changes in UBS’s competitive position, including whether differences in regulatory capital and other requirements among the major financial centers will adversely affect UBS’s ability to compete in certain lines of business; (ix) changes in the standards of conduct applicable to our businesses that may result from new regulation or new enforcement of existing standards, including recently enacted and proposed measures to impose new and enhanced duties when interacting with customers and in the execution and handling of customer transactions; (x) the liability to which UBS may be exposed, or possible constraints or sanctions that regulatory authorities might impose on UBS, due to litigation, contractual claims and regulatory investigations, including the potential for disqualification from certain businesses or loss of licenses or privileges as a result of regulatory or other governmental sanctions, as well as the effect that litigation, regulatory and similar matters have on the operational risk component of our RWA; (xi) the effects on UBS’s cross-border banking business of tax or regulatory developments and of possible changes in UBS’s policies and practices relating to this business; (xii) UBS’s ability to retain and attract the employees necessary to generate revenues and to manage, support and control its businesses, which may be affected by competitive factors including differences in compensation practices; (xiii) changes in accounting or tax standards or policies, and determinations or interpretations affecting the recognition of gain or loss, the valuation of goodwill, the recognition of deferred tax assets and other matters, including from changes to US taxation under the Tax Cuts and Jobs Act; (xiv) UBS’s ability to implement new technologies and business methods, including digital services and technologies and ability to successfully compete with both existing and new financial service providers, some of which may not be regulated to the same extent; (xv) limitations on the effectiveness of UBS’s internal processes for risk management, risk control, measurement and modeling, and of financial models generally; (xvi) the occurrence of operational failures, such as fraud, misconduct, unauthorized trading, financial crime, cyberattacks, and systems failures; (xvii) restrictions on the ability of UBS Group AG to make payments or distributions, including due to restrictions on the ability of its subsidiaries to make loans or distributions, directly or indirectly, or, in the case of financial difficulties, due to the exercise by FINMA or the regulators of UBS’s operations in other countries of their broad statutory powers in relation to protective measures, restructuring and liquidation proceedings; (xviii) the degree to which changes in regulation, capital or legal structure, financial results or other factors may affect UBS’s ability to maintain its stated capital return objective; and (xix) the effect that these or other factors or unanticipated events may have on our reputation and the additional consequences that this may have on our business and performance. The sequence in which the factors above are presented is not indicative of their likelihood of occurrence or the potential magnitude of their consequences. Our business and financial performance could be affected by other factors identified in our past and future filings and reports, including those filed with the SEC. More detailed information about those factors is set forth in documents furnished by UBS and filings made by UBS with the SEC, including UBS’s Annual Report on Form 20-F for the year ended 31 December 2017. UBS is not under any obligation to (and expressly disclaims any obligation to) update or alter its forward-looking statements, whether as a result of new information, future events, or otherwise.

**Rounding** | Numbers presented throughout this report may not add up precisely to the totals provided in the tables and text. Percentages, percent changes and absolute variances are calculated on the basis of rounded figures displayed in the tables and text and may not precisely reflect the percentages, percent changes and absolute variances that would be calculated on the basis of figures that are not rounded.

**Tables** | Within tables, blank fields generally indicate that the field is not applicable or not meaningful, or that information is not available as of the relevant date or for the relevant period. Zero values generally indicate that the respective figure is zero on an actual or rounded basis. Percentage changes are presented as a mathematical calculation of the change between periods.



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